JVC

SERVICE MANUAL

WIDE LCD PANEL TELEVISION

LT-23C50BJ, LT-23C50BU, LT-23C50BU/Z, LT-23C50SU, LT-23C50SU/Z, LT-23C88SJ

InteriArt

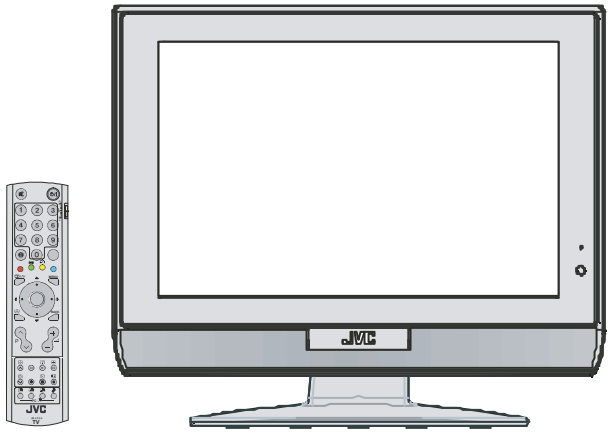


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No.YA220
2005/8

SPECIFICATION

Items		Contents
Dimensions (W × H × D)		61.4cm × 48.2cm × 24.0cm [Included stand] 61.4cm × 43.8cm × 7.9cm [TV only]
Mass		7.4kg [Included stand] 6.4kg [TV only]
Power Input		AC100V to AC240 V, 50 Hz
Power Consumption		108W (Standby: 3.0W)
TV RF System		CCIR B/G, I, D/K, L
Colour System		PAL / SECAM / NTSC 3.58 / NTSC 4.43 (NTSC: EXT only).
Stereo System		A2 (B/G, D/K), NICAM (B/G, I, D/K, L)
Teletext System		FLOF (Fastext), TOP, WST (World Standard System)
Receiving Frequency	VHF UHF CATV	47MHz to 470MHz 470MHz to 862MHz 116MHz to 172MHz / 220MHz to 469MHz
Intermediate Frequency	VIF SIF	38.9MHz(B/G, D/K, I) 33.4MHz(5.5MHz:B/G) / 32.9MHz(6.0MHz:I) / 32.4MHz(6.5MHz:L,D/K)
Colour Sub Carrier Frequency	PAL SECAM NTSC	4.43MHz 4.40625MHz / 4.25MHz 3.58MHz / 4.43MHz
LCD Panel		23V-inch wide aspect (15:9)
Screen Size		Diagonal : 58.3cm (H:50.8cm × V : 28.6cm)
Display Pixels		Horizontal : 1280 dots × Vertical : 768 dots (W-XGA)
Audio Power Output		5W + 5W(10% THD)
Speaker		3cm, oval type × 2
Aerial Terminal (VHF/UHF)		75Ω unbalanced, coaxial
EXT-1 / EXT-2 (Input / Output)		21-pin Euro connector (SCART socket) × 2
EXT-3(Input)	Component Video 625p / 525p / 625i / 525i Audio	RCA pin jack × 3 Y : 1V (p-p), Positive (Negative sync provided), 75 Ω Cb/Cr : 0.7V(p-p), 75 Ω 500mV(rms) (-4dBs), high impedance, RCA pin jack × 2
EXT-4 (Input)	S-Video Video Audio	Mini-DIN 4 pin × 1 Y: 1V (p-p), Positive (Negative sync provided), 75 Ω C: 0.286V (p-p) (Burst signal), 75 Ω 1V (p-p), Positive (Negative sync provided), 75 Ω, RCA pin jack × 1 500mV (rms), High impedance, RCA pin jack × 2
PC (RGB) Input		D-sub 15pin × 1 R/G/B : 0.7V (p-p), 75Ω HD / VD : 1V (p-p) to 5V (p-p), high impedance < Available signal > VGA : 640 pixels × 480 pixels (Horizontal : 31.5kHz / Vertical : 60Hz) XGA : 1024 pixels × 768 pixels (Horizontal : 48.4kHz / Vertical : 60Hz)
PC AUDIO Input		3.5mm stereo mini jack × 1
Audio Output		500mV (rms), Low impedance, RCA pin jack × 2
Subwoofer Output		More than 0 to 1000mV (rms) (+2.2dBs), low impedance (80Hz when modulated 100%), RCA pin jack × 1
Headphone		3.5mm stereo mini jack × 1
Remote Control Unit		RM-C1860 (AA/R6 dry cell battery × 2)

Design & specifications are subject to change without notice.

SECTION 1
PRECAUTION

1.1 SAFETY PRECAUTIONS

(1) The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

(2) Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual**. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

(4) **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED (NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND.
Don't short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND and never measure the LIVE side GND and ISOLATED (NEUTRAL) side GND or EARTH side GND at the same time with a measuring apparatus (oscilloscope etc.). If above note will not be kept, a fuse or any parts will be broken.

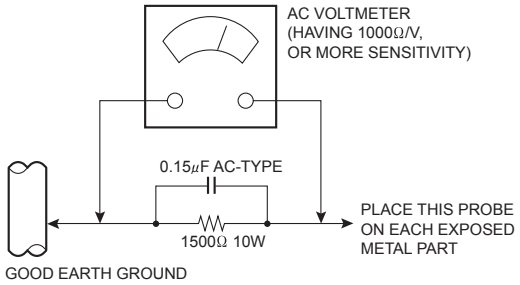
(5) When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

(6) **Isolation Check (Safety for Electrical Shock Hazard)**
After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

a) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second. (. . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

b) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

Alternate Check Method
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000Ω per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



1.2 INSTALLATION

1.2.1 HEAT DISSIPATION

If the heat dissipation vent behind this unit is blocked, cooling efficiency may deteriorate and temperature inside the unit will rise. The temperature sensor that protects the unit will be activated when internal temperature exceeds the pre-determined level and power will be turned off automatically.Therefore, please make sure pay attention not to block the heat dissipation vent as well as the ventilation outlet behind the unit and ensure that there is room for ventilation around it.

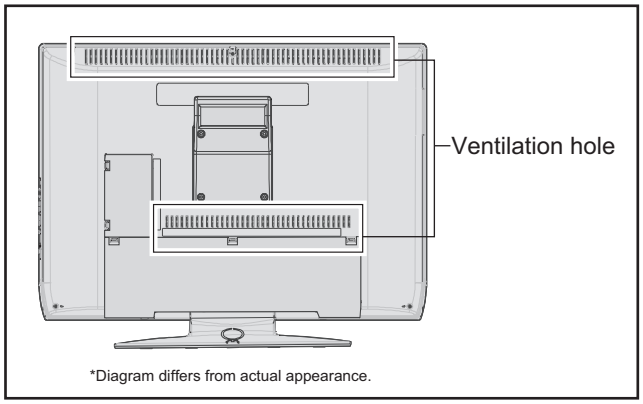


*Diagram differs from actual appearance.

1.2.2 INSTALLATION REQUIREMENTS

Ensure that the minimal distance is maintained, as specified below, between the unit with and the surrounding walls, as well as the floor etc.Install the unit on stable flooring or stands.Take precautionary measures to prevent the unit from tipping in order to protect against accidents and earthquakes.

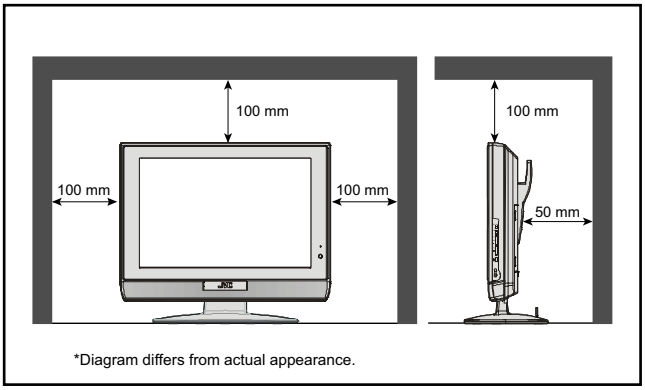


*Diagram differs from actual appearance.

1.2.3 INSTALLATION REQUIREMENTS

To ensure safety in an emergency such as an earthquake, and to prevent accidents, ensure that measures are taken to prevent the TV dropping or falling over.

Use the supplied screws to firmly attach the supplied hooks (OPTION) to the back of the TV, and use commercially available cord to fix the TV to rigid components such as walls and columns.

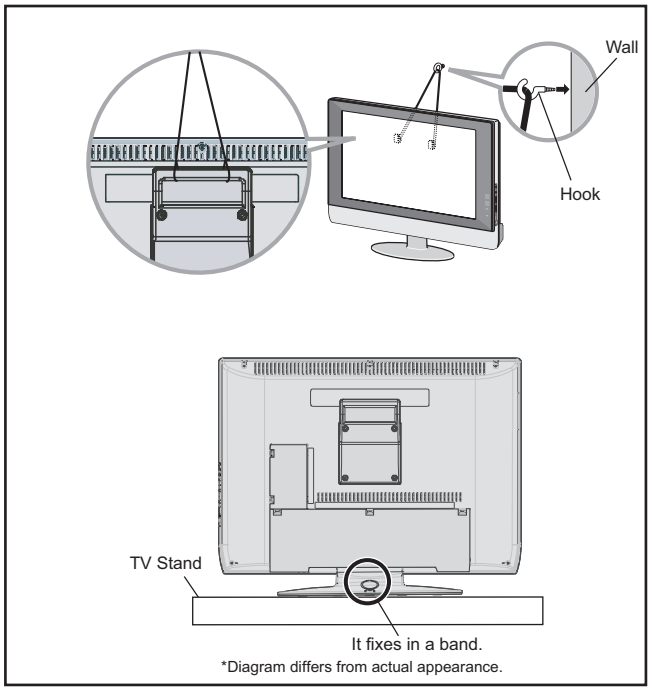


*Diagram differs from actual appearance.

1.2.4 NOTES ON HANDLING

(1) WHEN TAKING UNIT OUT OF A PACKING CASE

When taking the unit out of a packing case, do not grasp the upper part of the unit. If you take the unit out while grasping the upper part, the LCD PANEL may be damaged because of a pressure. Instead of grasping the upper part, put your hands on the lower backside or sides of the unit.

(2) AS FOR PRESSING OR TOUCHING A SPEAKER

Be careful not to press the opening of the speaker in the lower part of the unit and around them since the decorative sheet on the surface of the openings may be deformed.

1.3 HANDLING LCD PANEL

1.3.1 PRECAUTIONS FOR TRANSPORTATION

When transporting the unit, pressure exerted on the internal LCD panel due to improper handling (such as tossing and dropping) may cause damages even when the unit is carefully packed. To prevent accidents from occurring during transportation, pay careful attention before delivery, such as through explaining the handling instructions to transporters.

Ensure that the following requirements are met during transportation, as the LCD panel of this unit is made of glass and therefore fragile:

(1) USE A SPECIAL PACKING CASE FOR THE LCD PANEL
When transporting the LCD panel of the unit, use a special packing case (packing materials). A special packing case is used when a LCD panel is supplied as a service spare part.

(2) ATTACH PROTECTION SHEET TO THE FRONT
Since the front (display part) of the panel is vulnerable, attach the protection sheet to the front of the LCD panel before transportation. Protection sheet is used when a LCD panel is supplied as a service spare part.

(3) AVOID VIBRATIONS AND IMPACTS
The unit may be broken if it is toppled sideways even when properly packed. Continuous vibration may shift the gap of the panel, and the unit may not be able to display images properly. Ensure that the unit is carried by at least 2 persons and pay careful attention not to exert any vibration or impact on it.

(4) DO NOT PLACE EQUIPMENT HORIZONTALLY
Ensure that it is placed upright and not horizontally during transportation and storage as the LCD panel is very vulnerable to lateral impacts and may break. During transportation, ensure that the unit is loaded along the traveling direction of the vehicle, and avoid stacking them on one another. For storage, ensure that they are stacked in 2 layers or less even when placed upright.

1.3.2 OPTICAL FILTER (ON THE FRONT OF THE LCD PANEL)

(1) Avoid placing the unit under direct sunlight over a prolonged period of time. This may cause the optical filter to deteriorate in quality and COLOUR.

(2) Clean the filter surface by wiping it softly and lightly with a soft and lightly fuzz cloth (such as outing flannel).

(3) Do not use solvents such as benzene or thinner to wipe the filter surface. This may cause the filter to deteriorate in quality or the coating on the surface to come off. When cleaning the filter, usually use the neutral detergent diluted with water. When cleaning the dirty filter, use water-diluted ethanol.

(4) Since the filter surface is fragile, do not scratch or hit it with hard materials. Be careful enough not to touch the front surface, especially when taking the unit out of the packing case or during transportation.

1.3.3 PRECAUTIONS FOR REPLACEMENT OF EXTERIOR PARTS

Take note of the following when replacing exterior parts (REAR COVER, FRONT PANEL, etc.):

(1) Do not exert pressure on the front of the LCD panel (filter surface). It may cause irregular COLOUR.

(2) Pay careful attention not to scratch or stain the front of the LCD panel (filter surface) with hands.

(3) When replacing exterior parts, the front (LCD panel) should be placed facing downward. Place a mat, etc. underneath to avoid causing scratches to the front (filter surface).

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

2.1 FEATURES

T-V LINK

When you have a T-V LINK compatible VCR connected to the EXT-2 Terminal on the TV,it is easier to set up the VCR and to view videos.

ZOOM

This function can change the screen size according to the picture aspect ratio.

OFF TIMER

This function can set the TV to automatically turn off after a set time.

COLOUR SYSTEM

If the picture is not clear or no colour appears, change the current colour system to another colour system.

2.2 MAIN DIFFERENCE LIST

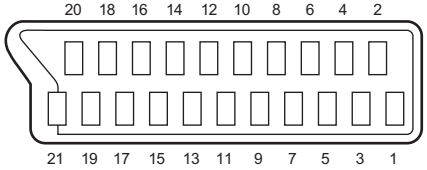
Items	LT-23C50BU	LT-23C50SU	LT-23C50BU/Z	LT-23C50SU/Z	LT-23C50BJ	LT-23C88SJ
CABINET COLOUR	BLACK	SILVER	BLACK	SILVER	BLACK	SILVER
POWER CORD	EU type(2-pin)	←	SWE Type(3-pin) EU type(2-pin)	←	UK type(3-pin)	←

2.3 21-PIN EURO CONNECTOR (SCART) : EXT-1 / EXT-2

Pin No.	Signal designation	Matching value	EXT-1	EXT-2
1	AUDIO R output	500mV(rms) (Nominal),, Low impedance	Used (TV OUT)	Used (LINE OUT)
2	AUDIO R input	500mV(rms) (Nominal),, High impedance	Used (R1)	Used (R2)
3	AUDIO L output	500mV(rms) (Nominal),, Low impedance	Used (TV OUT)	Used (LINE OUT)
4	AUDIO GND		Used	Used
5	GND (B)		Used	Used
6	AUDIO L input	500mV(rms) (Nominal),, High impedance	Used (L1)	Used (L2)
7	B input	$700mV_{(B-W)}$, 75Ω	Used	Used
8	FUNCTION SW (SLOW SW)	Low : 0V-3V High : 8V-12V, High impedance	Used	Used
9	GND (G)		Used	Used
10	SCL / T-V LINK		Not used	Used (SCL2 / TV-LINK)
11	G input	$700mV_{(B-W)}$, 75Ω	Used	Used
12	SDA		Not used	Used (SDA2)
13	GND (R)		Used	Used
14	GND (YS)		Used	Not used
15	R / C input	R : $700mV_{(B-W)}$, 75Ω C : $300mV_{(P-P)}$, 75Ω	Used (R)	Used (C2/R)
16	Ys input (FAST SW)	Low : 0V-0.4V, High : 1V-3V, 75Ω	Used	Used
17	GND (VIDEO output)		Used	Used
18	GND (VIDEO input)		Used	Used
19	VIDEO output	$1V_{(P-P)}$ (Negative sync), 75Ω	Used (TV OUT)	Used (LINE OUT)
20	VIDEO / Y input	$1V_{(P-P)}$ (Negative sync), 75Ω	Used	Used
21	COMMON GND		Used	Used

(P-P= Peak to Peak, B-W= Blanking to white peak)

[Pin assignment]



2.4 TECHNICAL INFORMATION

2.4.1 LCD PANEL

This unit uses the flat type panel LCD (Liquid Crystal Display) panel that occupies as little space as possible, instead of the conventional CRT (Cathode Ray Tube), as a display unit.
Since the unit has the two polarizing filter that are at right angles to each other, the unit adopts "normally black" mode, where light does not pass through the polarizing filter and the screen is black when no voltage is applied to the liquid crystals.

2.4.1.1 SPECIFICATIONS

The following table shows the specifications of this unit.

Item	Specifications	Remarks
Displayed colour	16777216 colours	256 colours for R, G, and B
Brightness	500cd/m^2	
Contrast ratio	800: 1	
Response time	25ms	
View angle	Horizontally: 176°, Vertically: 170°	

2.4.1.2 PIXEL FAULT

There are three pixel faults - bright fault , dark fault and flicker fault - that are respectively defined as follows.

■ **BRIGHT FAULT**

In this pixel fault, a cell that should not light originally is lighting on and off.
For checking this pixel fault, input ALL BLACK SCREEN and find out the cell that is lighting on and off.

■ **DARK FAULT**

In this pixel fault, a cell that should light originally is not lighting or lighting with the brightness twice as brighter as originally lighting.
For checking this pixel fault, input 100% of each R/G/B colour and find out the cell that is not lighting.

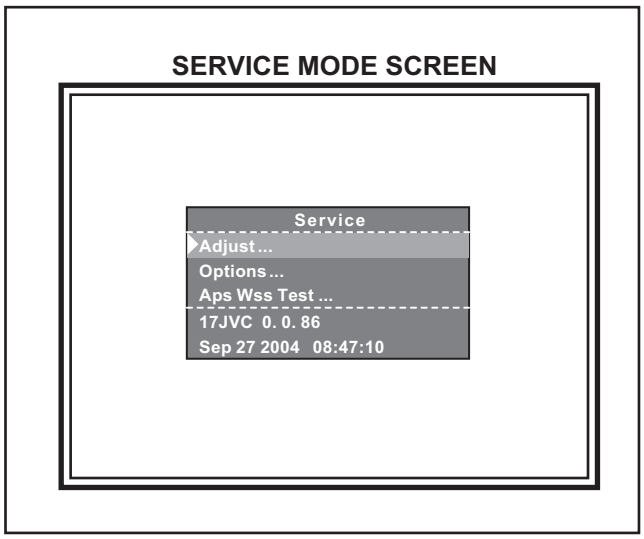
■ **FLICKER FAULT**

In the pixel fault, a cell that should light originally or not light originally is flashing on and off.
For checking this pixel fault, input ALL BLACK SCREEN signal or 100% of each RGB colour and find out the cell that is flashing on and off.

2.5 BASIC OPERATION OF SERVICE MODE

2.5.1 HOW TO ENTER THE SERVICE MODE

(1) Press **[INFORMATION]** key and **[MUTING]** key on the remote control unit simultaneously to enter the SERVICE MODE SCREEN.



2.5.2 HOW TO EXIT THE SERVICE MODE

Press the **[MENU]** key to exit the Service mode.

2.5.3 CHANGE AND MEMORY OF SETTING VALUE

■ **SELECTION OF SETTING MENU & ITEM**

- **[FUNCTION ▲/▼]** key : Select the SETTING MENU & ITEM
- **[OK]** key : Decision the SETTING MENU & ITEM

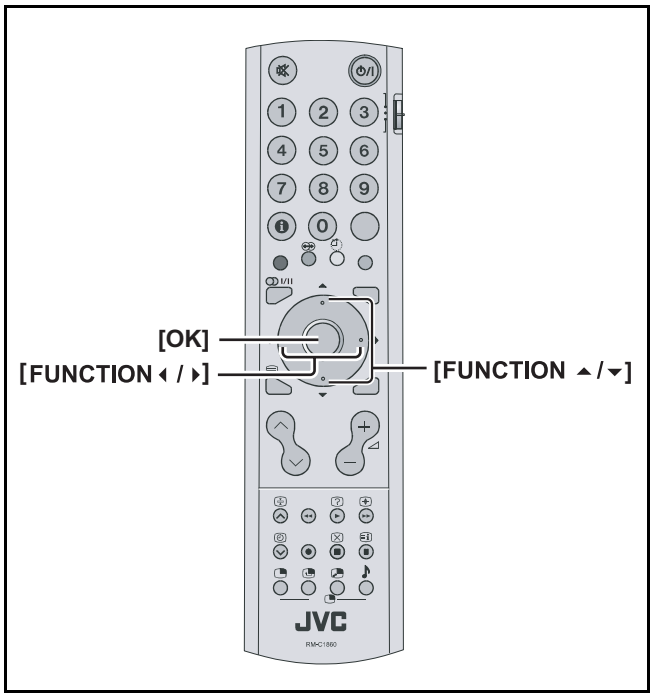
■ **CHANGE OF SETTING VALUE (DATA)**

- **[FUNCTION ◀ / ▶]** key.

■ **MEMORY OF SETTING VALUE (DATA)**

The setting value will be stored automatically when release the REMOTE CONTROL UNIT keys

2.5.4 SERVICE MODE SELECT KEY LOCATION



2.5.5 SERVICE MODE SETTING ITEMS

Setting menu	Setting items	Contents
Adjust	Group	----
	Mode	----
	Col. Temp.	----
	Contrast	----
	Brightness	----
	Colour	----
	Sharpness	----
	Red	----
	Green	----
	Blue	----
	Aps Volume	----
Option 1	First APS	If ON, TV starts with APS menu at Start-up
	BG	----
	DK	----
	I	----
	L	----
	L'	----
	FM Prs Avl On	Adjusts the FM Prescaler value, when Automatic Volume Levelling is On
	Nicam Prs Avl On	Adjusts the Nicam Prescaler value, when Automatic Volume Levelling is On
	Scart Prs Avl On	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	Scart Volume Avl On	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	FM Prs Avl Off	Adjusts the FM Prescaler value, when Automatic Volume Levelling is Off
Option 2	Nicam Prs Avl Off	Adjusts the Nicam Prescaler value, when Automatic Volume Levelling is Off
	Scart Prs Avl Off	Adjusts the Scart Prescaler value, when Automatic Volume Levelling is Off
	Scart Volume Avl Off	Adjusts the Scart Volume value, when Automatic Volume Levelling is On
	Avl	Enable/disable Automatic Volume Levelling System
	Sound	----
	Carrier	----
	LDLY	----
	AGC	----
Aps Wss Test	Programme	----
	VPS	----
	Scart Volume Avl Off	----
	Pdc Format 1	----
	Pdc Format 2	----
	Name	----
	WSS	----

SECTION 3
DISASSEMBLY

3.1 DISASSEMBLY PROCEDURE

NOTE:

- Make sure that the power cord is disconnected from the outlet.
- Pay special attention not to break or damage the parts.
- When removing each board, remove the connectors as required.
- Taking notes of the connecting points (connector numbers) makes service procedure manageable.
- Make sure that there is no bent or stain on the connectors before inserting, and firmly insert the connectors.

3.1.1 REMOVING THE STAND UNIT

- Remove the TFT DOOR SOCKET / AV DOOR SOCKET.
 (1) Remove the 2 screws **[A]**, then remove the FOOT TOP COVER.
 (2) Remove the 4 screws **[B]**, then remove the STAND UNIT.

3.1.2 REMOVING THE HANDLE

- Remove the STAND UNIT.
 (1) Remove the 4 screws **[C]**.
 (2) Remove the HANDLE.

3.1.3 REMOVING THE BACK COVER

- Remove the STAND UNIT.
- Remove the HANDLE.
 (1) Remove the 5 screws **[D]**.
 (2) Remove the BACK COVER toward you.

3.1.4 REMOVING THE AV JACK PWB

- Remove the STAND UNIT.
- Remove the HANDLE.
- Remove the BACK COVER.
 (1) Remove the 2 screws **[E]**.
 (2) Remove the AV JACK PWB.

3.1.5 REMOVING THE BRACKET SCART

- Remove the STAND UNIT.
- Remove the HANDLE.
- Remove the BACK COVER.
- Remove the AV JACK PWB.
 (1) Remove the 2 screws **[F]**.
 (2) Remove the BRACKET SCART.

3.1.6 REMOVING THE MAIN PWB

- Remove the STAND UNIT.
- Remove the HANDLE.
- Remove the BACK COVER.
- Remove the BRACKET SCART.
 (1) Remove the 7 screws **[G]**.
 (2) Remove the MAIN PWB.

3.1.7 REMOVING THE MAIN FRAME

- Remove the STAND UNIT / HANDLE & BACK COVER.
- Remove the BRACKET SOCKET & BRACKET SCART.
- Remove the MAIN PWB.
 (1) Remove the 18 screws **[H]**.
 (2) Remove the MAIN FRAME.

3.1.8 REMOVING THE LCD PANEL UNIT

- Remove the STAND UNIT, HANDLE & BACK COVER.
- Remove the BRACKET SCRAT & MAIN PWB.
- Remove the MAIN FRAME & INVERTER PWB / FRAME.
 (1) Remove the 1 screws **[I]**.
 (2) Follow the same step when removing the other hand DISPLAY SUPPORT.
 (3) Sightly raise the both sides of the LCD PANEL UNIT by hand from the FRONT COVER.

NOTE:

- Pay special attention not to break or damage on the LCD PANEL face or frame.
- The LCD PANEL UNIT is fixed to the FRONT COVER (at the back side)by using double-side adhesive tapes. To remove the LCD PANEL UNIT, remove the adhesive tape on the FRONT PANELslowly.

3.1.9 REMOVING THE SPEAKERS

- Remove the STAND UNIT, HANDLE & BACK COVER.
 (1) Remove the 2 screws **[J]** from each speaker.
 (2) Remove the SPEAKER from the FRONT COVER.
 (3) Follow the same when removing the other hand speakers.

3.1.10 REMOVING THE HEADPHONE PWB

- Remove the STAND UNIT, HANDLE & BACK COVER.
 (1) Remove the 1 screw **[K]**.
 (2) Remove the HEADPHONE PWB from the FRONT COVER.

3.1.11 REMOVING THE LED PWB

- Remove the STAND UNIT, HANDLE & BACK COVER.
- Remove the BRACKET SOCKET, BRACKET SCART, MAIN PWB, INVERTER FRAME & MAIN FRAME.
 (1) Remove the 1 screw **[L]**.
 (2) Remove the LED PWB from the FRONT COVER.

3.1.12 REMOVING THE SIDE CONTROL PWB

- Remove the LED PWB / HEADPHONE PWB.
 (1) Remove the 2 screws **[M]**.
 (2) Remove the SIDE CONTROL PWB with control knob.
 (3) Remove the SIDE CONTROL PWB from control knob.

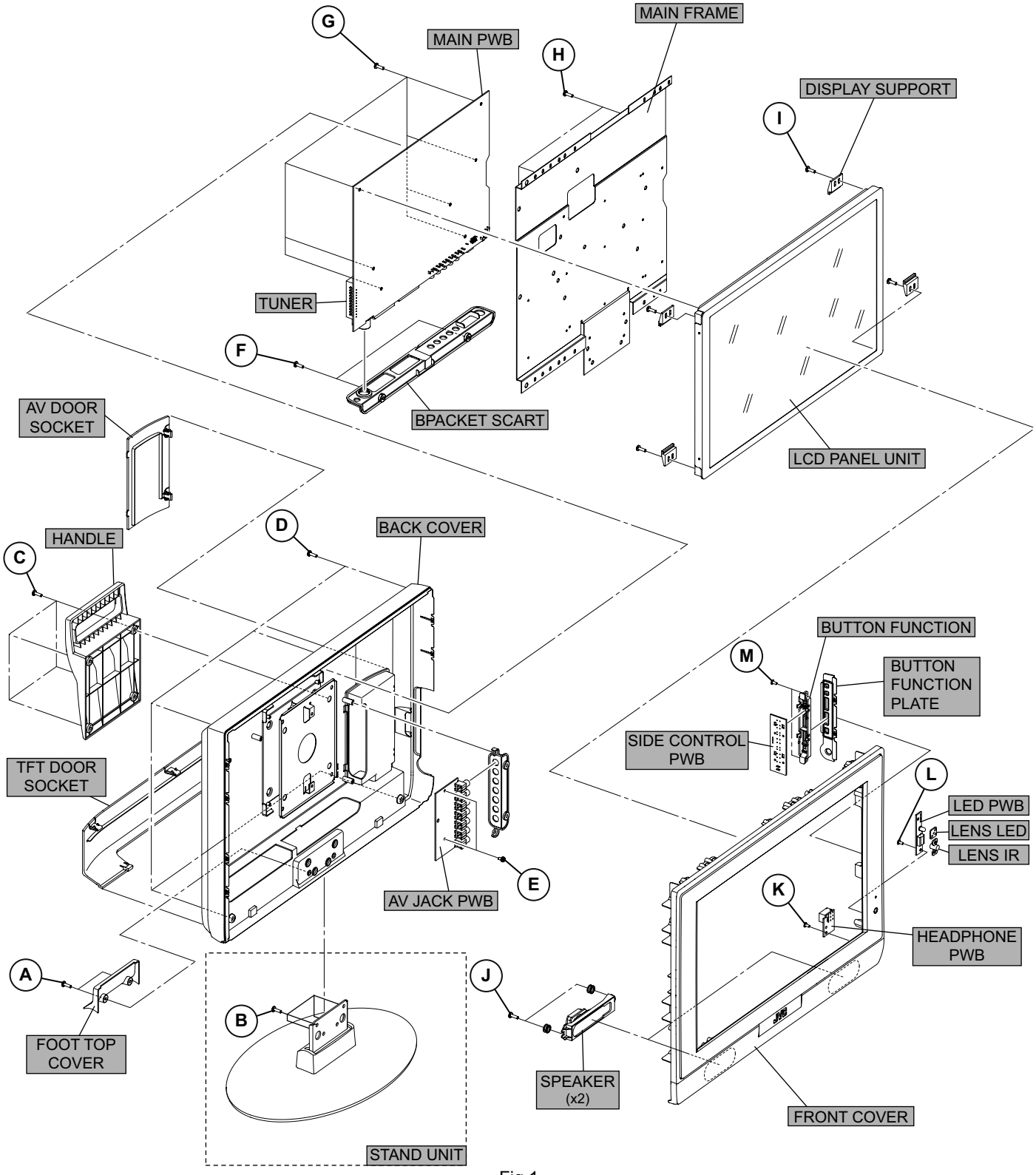

G
MAIN PWB
MAIN FRAME
H
DISPLAY SUPPORT
I
TUNER
F
BPACKET SCART
LCD PANEL UNIT
AV DOOR SOCKET
HANDLE
D
BACK COVER
C
BUTTON FUNCTION
M
BUTTON FUNCTION PLATE
SIDE CONTROL PWB
TFT DOOR SOCKET
L
LED PWB
LENS LED
LENS IR
AV JACK PWB
E
K
HEADPHONE PWB
A
J
B
FOOT TOP COVER
SPEAKER (x2)
FRONT COVER
STAND UNIT

Fig.1

3.2 MEMORY IC REPLACEMENT

- This model uses the memory IC.
- This memory IC stores data for proper operation of the video and drive circuits.
- When replacing, be sure to use an IC containing this (initial value) data.

3.2.1 SETTINGS OF FACTORY SHIPMENT

3.2.1.1 BUTTON OPERATION

Setting item	Setting position
POWER	Off
TV/AV	TV

3.2.1.2 REMOTE CONTROL DIRECT OPERATION

Setting item	Setting position
ZOOM	AUTO

3.2.1.3 REMOTE CONTROL MENU OPERATION

(1) PICTURE

Setting item	Setting position
MODE	Bright
Contrast	33 Step
Bright-1	26 Step
Sharpness	11 Step
Colour	36 Step
Bright-2	31 Step
Colour Temp.	Cool
Nolse Red.	Min

(2) SOUND

Setting item	Setting position
Volume	10 Step
Bass	16 Step
Treble	15 Step
Balance	16 Step
Hyper Sound	Off
Sound Mode	Mono

(3) FEATURES

Setting item	Setting position
Sleep Timer	Off
Child Lock	Off
Language	English
EXT-2 Output	TV
Blue Back	Off

(4) Install [TV MODE]

Setting item	Setting position
Colour System	Auto
Decorder(EXT-2)	Off
VCR	Off

(5) Install [EXT MODE]

Setting item	Setting position
Colour System	Auto
VCR	Off

3.3 REPLACEMENT OF CHIP COMPONENT

3.3.1 CAUTIONS

(1) Avoid heating for more than 3 seconds.
(2) Do not rub the electrodes and the resist parts of the pattern.
(3) When removing a chip part, melt the solder adequately.
(4) Do not reuse a chip part after removing it.

3.3.2 SOLDERING IRON

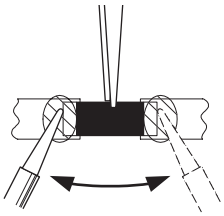
(1) Use a high insulation soldering iron with a thin pointed end of it.
(2) A 30w soldering iron is recommended for easily removing parts.

3.3.3 REPLACEMENT STEPS

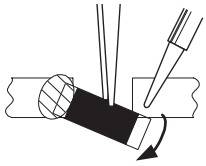
1. How to remove Chip parts

[Resistors, capacitors, etc.]

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.



(2) Shift with the tweezers and remove the chip part.

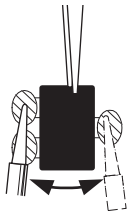


[Transistors, diodes, variable resistors, etc.]

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.



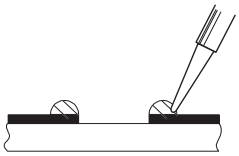
NOTE :

After removing the part, remove remaining solder from the pattern.

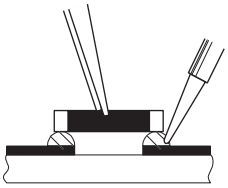
2. How to install Chip parts

[Resistors, capacitors, etc.]

(1) Apply solder to the pattern as indicated in the figure.

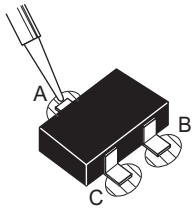


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

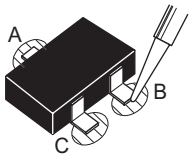


[Transistors, diodes, variable resistors, etc.]

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



SECTION 4
ADJUSTMENT

This service manual does not describe ADJUSTMENT.

SECTION 5
TROUBLESHOOTING

This service manual does not describe TROUBLESHOOTING.

JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY DISPLAY CATEGORY 12, 3-chome, Moriya-cho, Kanagawa-ku, Yokohama-city, Kanagawa-prefecture, 221-8528, Japan

(No.YA220)

Printed in Japan
VPT

JVC

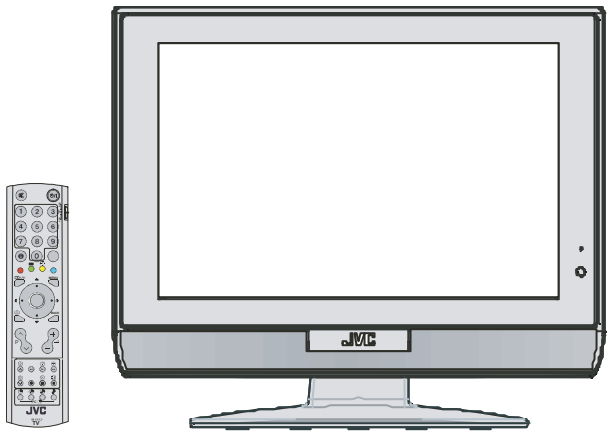
SCHEMATIC DIAGRAMS

WIDE LCD PANEL TELEVISION

LT-23C50BJ, LT-23C50BU, LT-23C50BU/Z, LT-23C50SU, LT-23C50SU/Z, LT-23C88SJ

CD-ROM No.SML200508

InteriArt



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No.YA220
2005/8

LT-23C50BJ, LT-23C50BU, LT-23C50BU/Z, LT-23C50SU, LT-23C50SU/Z, LT-23C88SJ

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety ciritical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Colour bar signal
(2)Setting positions of each knob/button and variable resistor	: Original setting position when shipped
(3)Internal resistance of tester	: DC 20kΩ/V
(4)Oscilloscope sweeping time	: H ⇒ 20μs / div
	: V ⇒ 5ms / div
	: Othters ⇒ Sweeping time is specified
(5)Voltage values	: All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board : R209 → R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

No unit	: [Ω]
K	: [kΩ]
M	: [MΩ]

● Rated allowable power

No indication	: 1/16 [W]
Others	: As specified

● Type

No indication	: Carbon resistor
OMR	: Oxide metal film resistor
MFR	: Metal film resistor
MPR	: Metal plate resistor
UNFR	: Uninflammable resistor
FR	: Fusible resistor

∗ Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

1 or higher	: [pF]
less than 1	: [μF]

● Withstand voltage

No indication	: DC50[V]
Others	: DC withstand voltage [V]
AC indicated	: AC withstand voltage [V]

∗ Electrolytic Capacitors
47/50[Example]: Capacitance value [μF]/withstand voltage[V]

● Type

No indication	: Ceramic capacitor
MM	: Metalized mylar capacitor
PP	: Polypropylene capacitor
MPP	: Metalized polypropylene capacitor
MF	: Metalized film capacitor
TF	: Thin film capacitor
BP	: Bipolar electrolytic capacitor
TAN	: Tantalum capacitor

(3)Coils

No unit	: [μH]
Others	: As specified

(4)Power Supply

: B1


: B2 (12V)


: 9V


: 5V

∗ Respective voltage values are indicated

(5)Test point

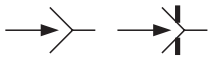

: Test point


: Only test point display

(6)Connecting method


: Connector


: Wrapping or soldering


: Receptacle

(7)Ground symbol


: LIVE side ground


: ISOLATED(NEUTRAL) side ground


: EARTH ground


: DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time.
If the above precaution is not respected, a fuse or any parts will be broken.

◆ **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

NOTE

◆ **Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.**
When ordering parts, please use the numbers that appear in the Parts List.

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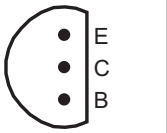
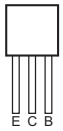
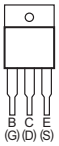
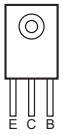
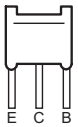
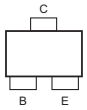
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USING P.W. BOARD

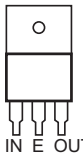
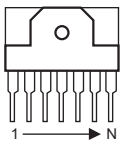
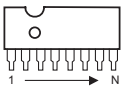
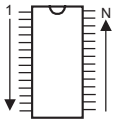
P.W.B ASS'Y name	LT-23C50BJ	LT-23C50BU	LT-23C50BU/Z	LT-23C50SU	LT-23C50SU/Z	LT-23C88SJ
MAIN P.W. BOARD	VE-20182807	VE-20180595	←	←	←	←
SIDE CONTROL P.W. BOARD	VE-20174624	←	←	←	←	←
LED P.W. BOARD	VE-20174629	←	←	←	←	←
AV JACK P.W. BOARD	VE-20177847	←	←	←	←	←
HEADPHONE JACK P.W. BOARD	VE-20177874	←	←	←	←	←

SEMICONDUCTOR SHAPES

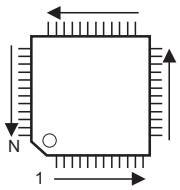
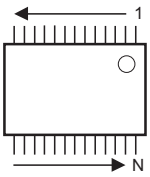
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

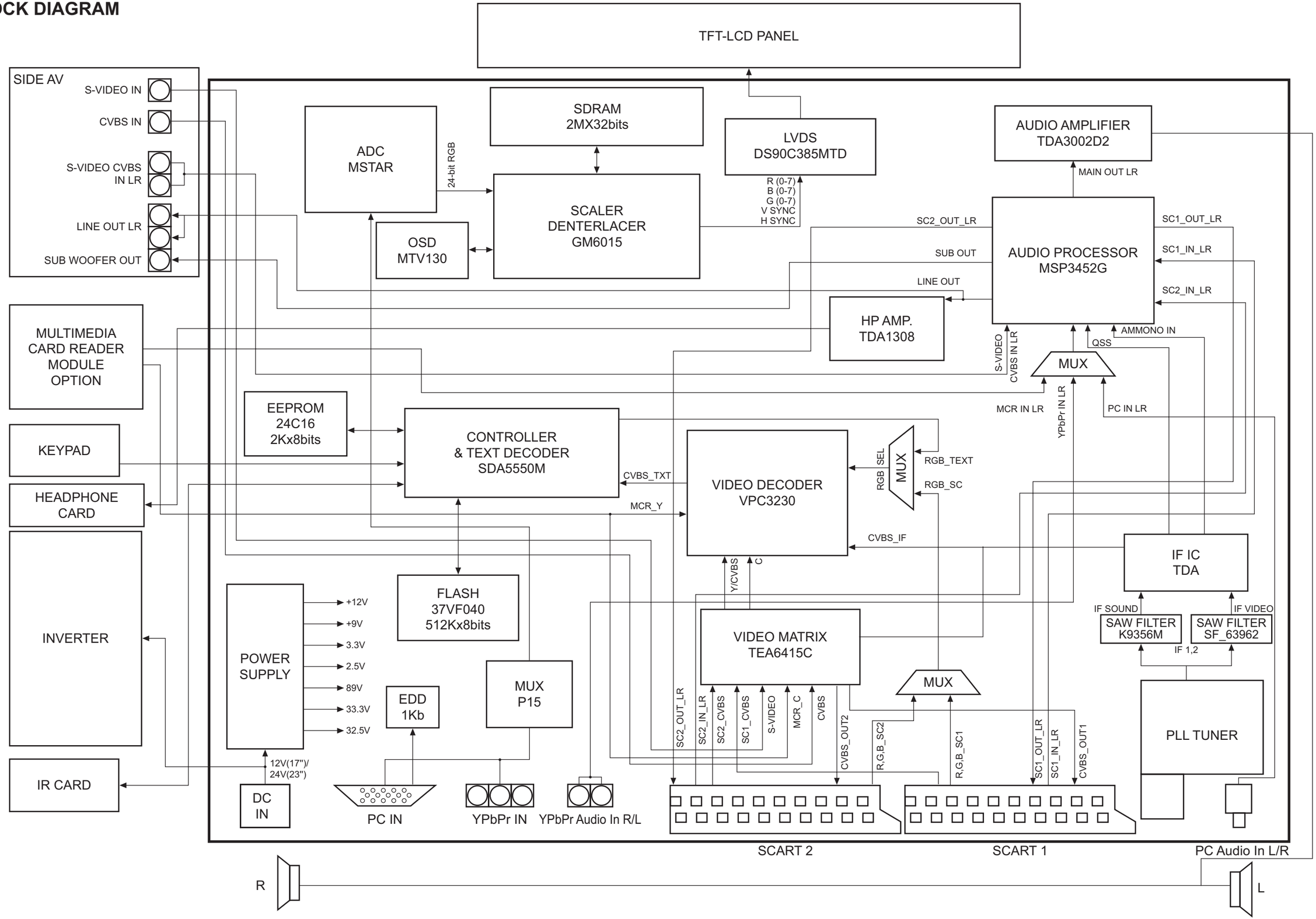
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

TOP VIEW		
		

BLOCK DIAGRAM



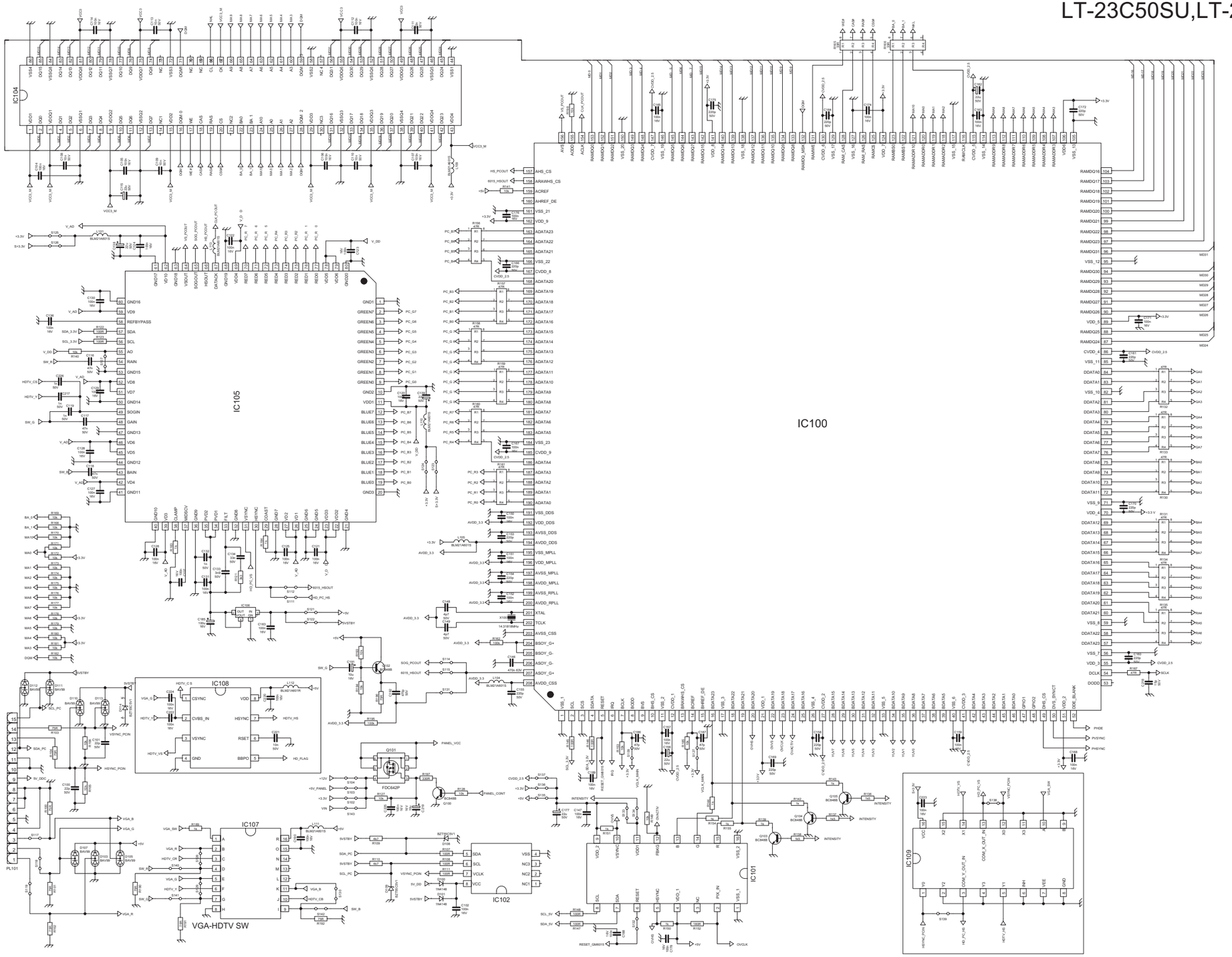
CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM (1/8)

MAIN PWB ASS'Y (1/8)

VE-20182807 [LT-23C50BJ]

VE-20180595 [LT-23C50BU,LT-23C50BU/Z,
LT-23C50SU,LT-23C50SU/Z,LT-23C88SJ]



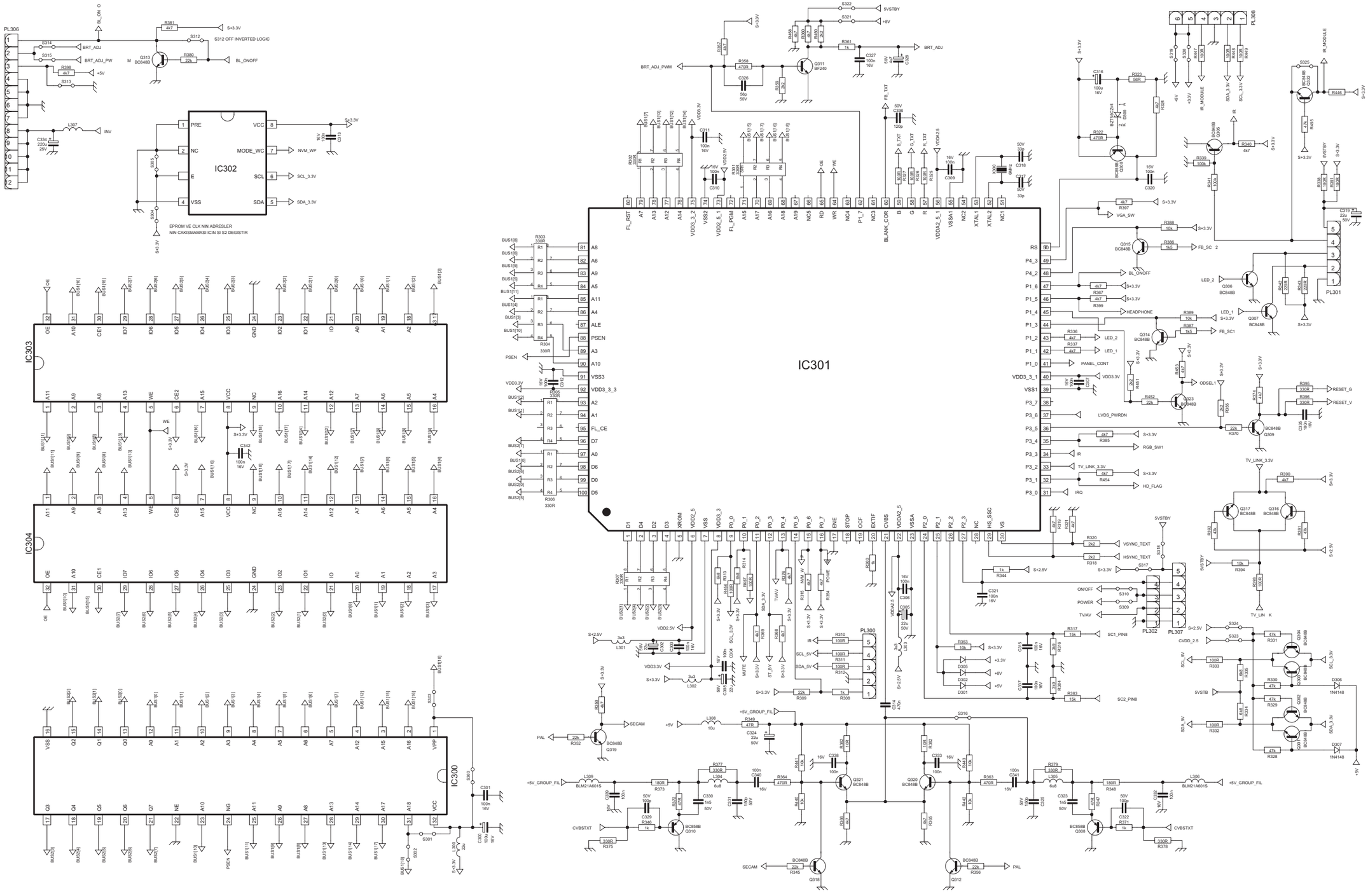
(No.YA220)2-5 2-6(No.YA220)

MAIN PWB ASS'Y (2/8)

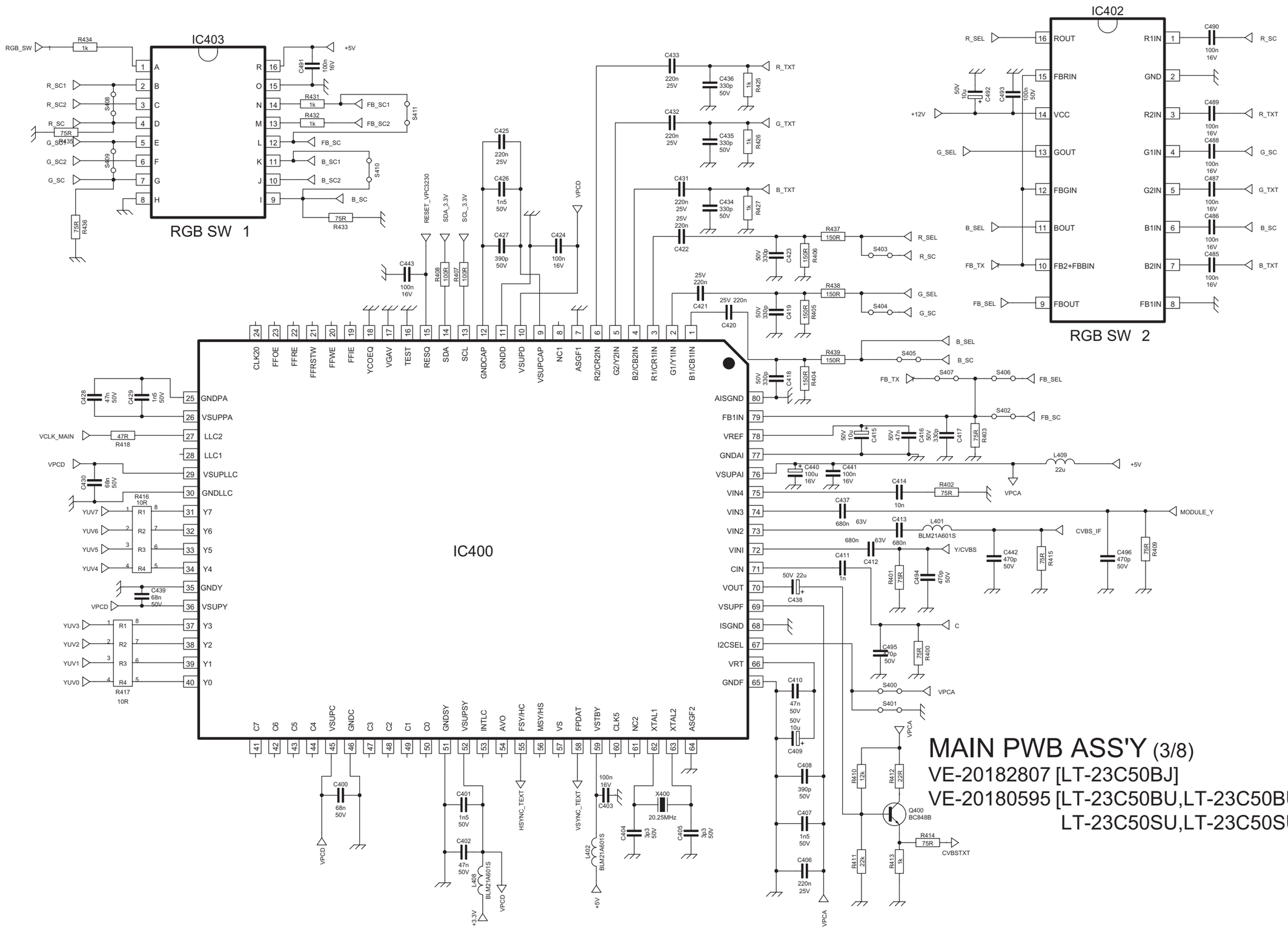
VE-20182807 [LT-23C50BJ]

VE-20180595 [LT-23C50BU,LT-23C50BU/Z, LT-23C50SU,LT-23C50SU/Z,LT-23C88SJ]

NOTE : Refer to the part list for the part number of IC301 and IC302.



MAIN PWB CIRCUIT DIAGRAM (3/8)

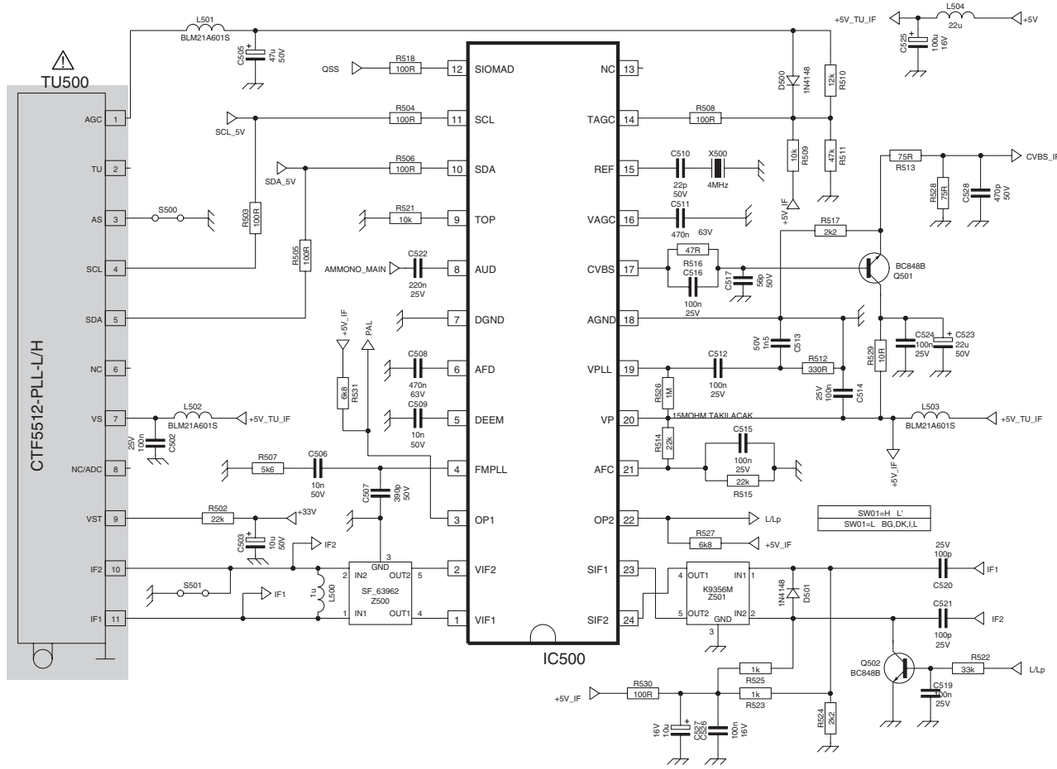


MAIN PWB ASS'Y (3/8)

VE-20182807 [LT-23C50BJ]

VE-20180595 [LT-23C50BU,LT-23C50BU/Z,
LT-23C50SU,LT-23C50SU/Z,LT-23C88SJ]

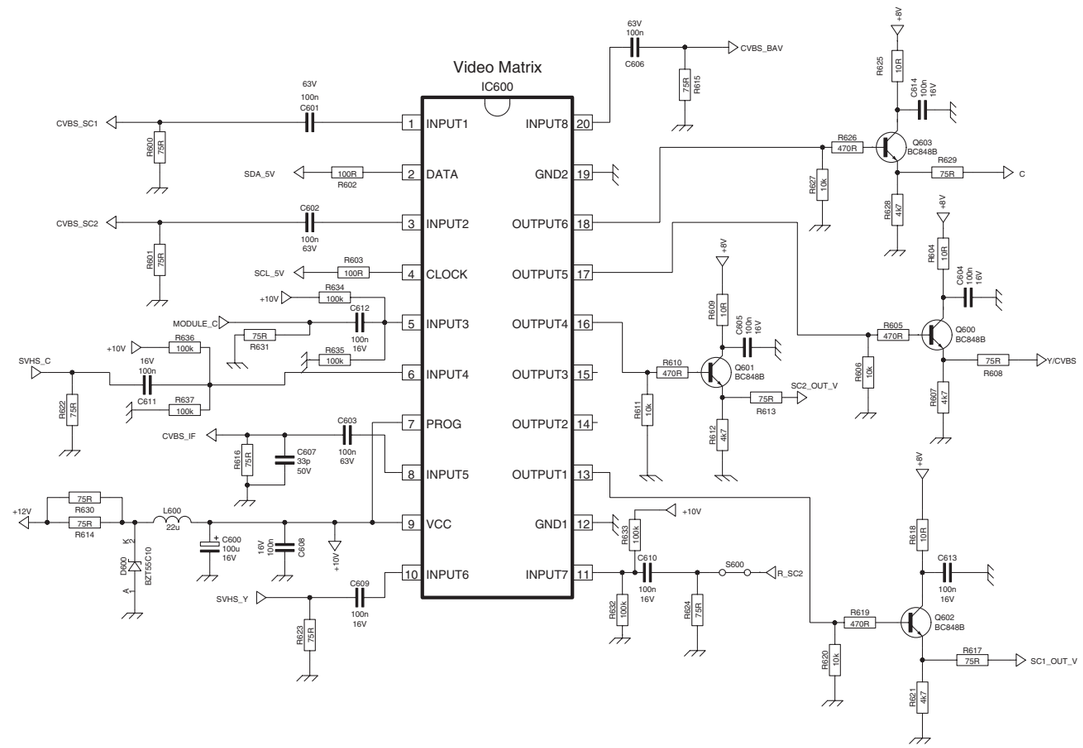
MAIN PWB CIRCUIT DIAGRAM (4/8)



MAIN PWB ASS'Y (4/8)

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VE-20180595 [LT-23C50BU,LT-23C50BU/Z,
LT-23C50SU,LT-23C50SU/Z,LT-23C88SJ]

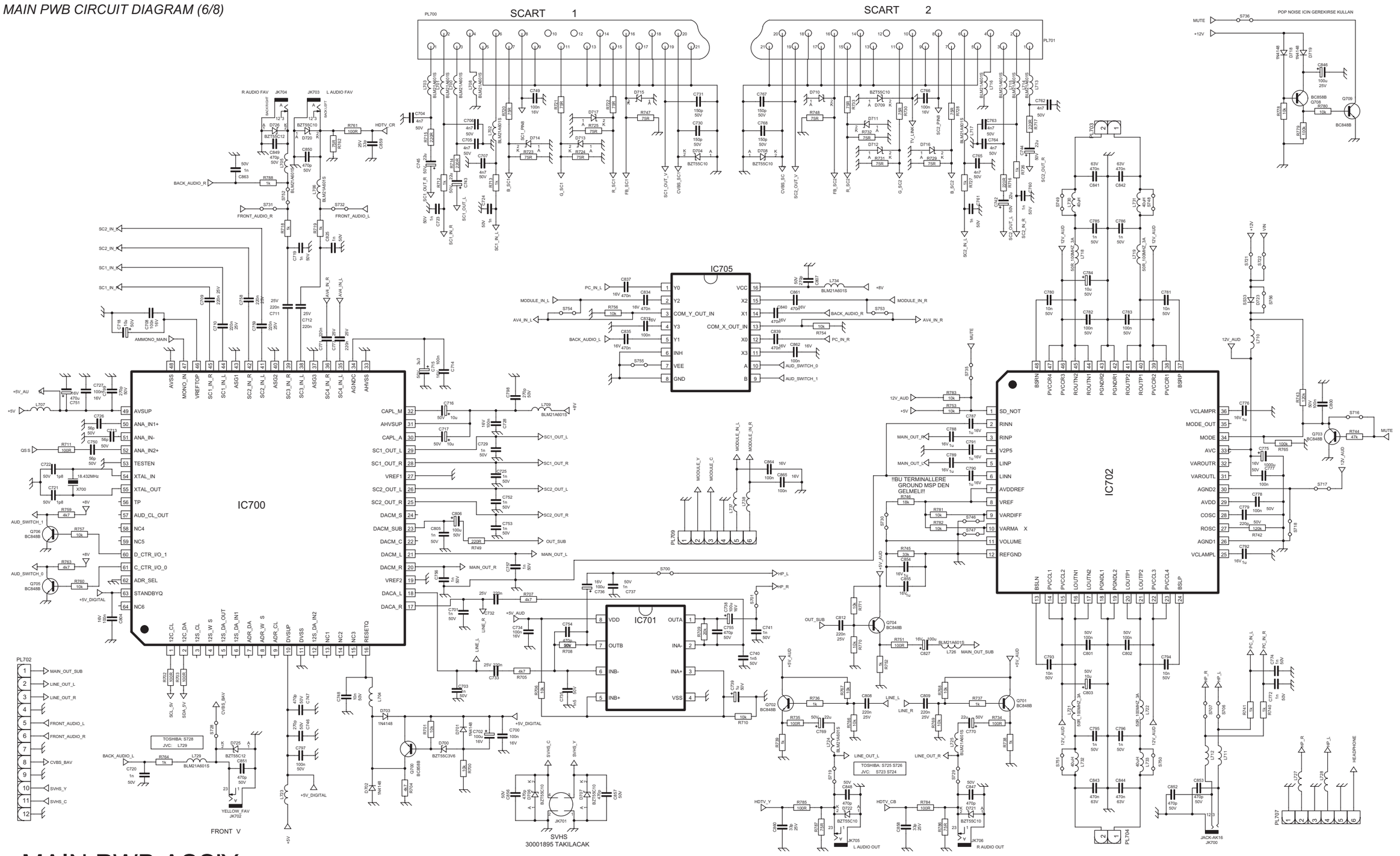
MAIN PWB CIRCUIT DIAGRAM (5/8)



MAIN PWB ASS'Y (5/8)

VE-20182807 [LT-23C50BJ]
VE-20180595 [LT-23C50BU,LT-23C50BU/Z,
LT-23C50SU,LT-23C50SU/Z,LT-23C88SJ]

MAIN PWB CIRCUIT DIAGRAM (6/8)



MAIN PWB ASS'Y (6/8)

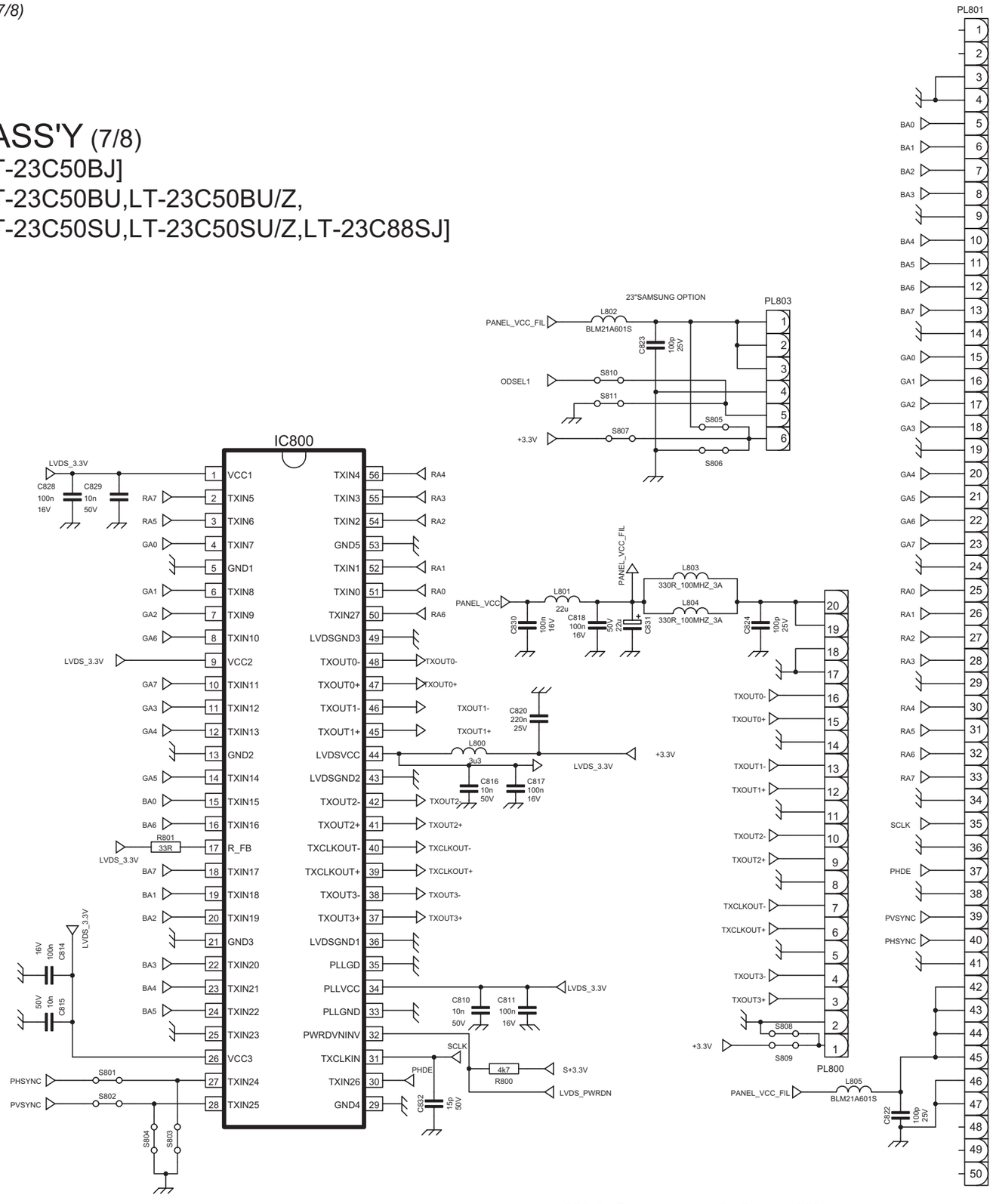
VE-20182807 [LT-23C50BJ]

VE-20180595 [LT-23C50BU,LT-23C50BU/Z,
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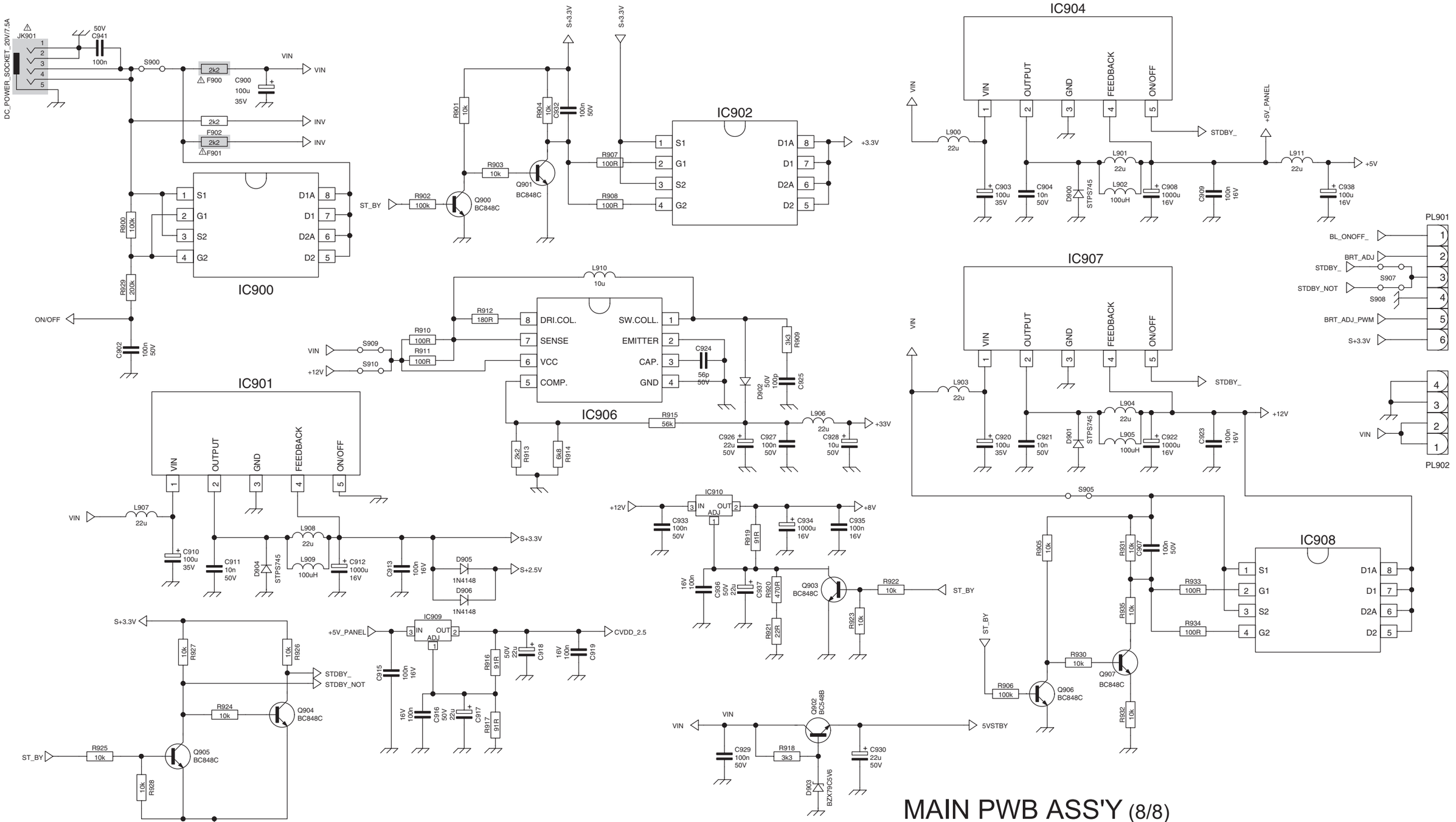
MAIN PWB ASS'Y (7/8)

VE-20182807 [LT-23C50BJ]

VE-20180595 [LT-23C50BU,LT-23C50BU/Z, LT-23C50SU,LT-23C50SU/Z,LT-23C88SJ]



MAIN PWB CIRCUIT DIAGRAM (8/8)

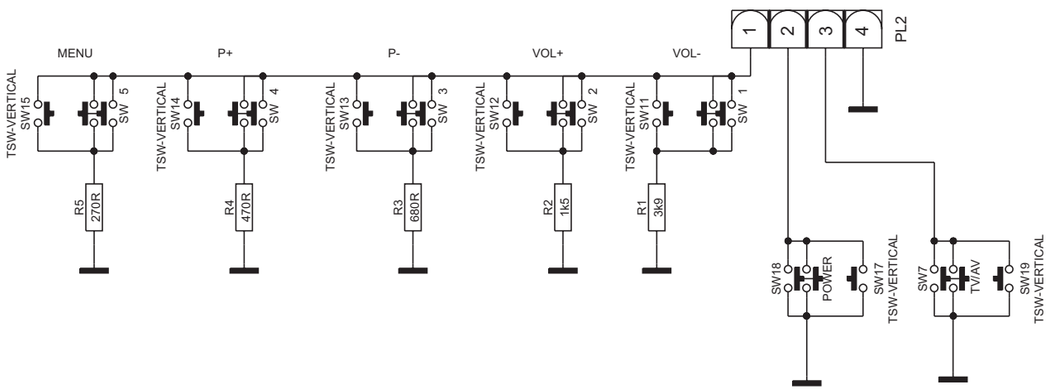


MAIN PWB ASS'Y (8/8)

VE-20182807 [LT-23C50BJ]

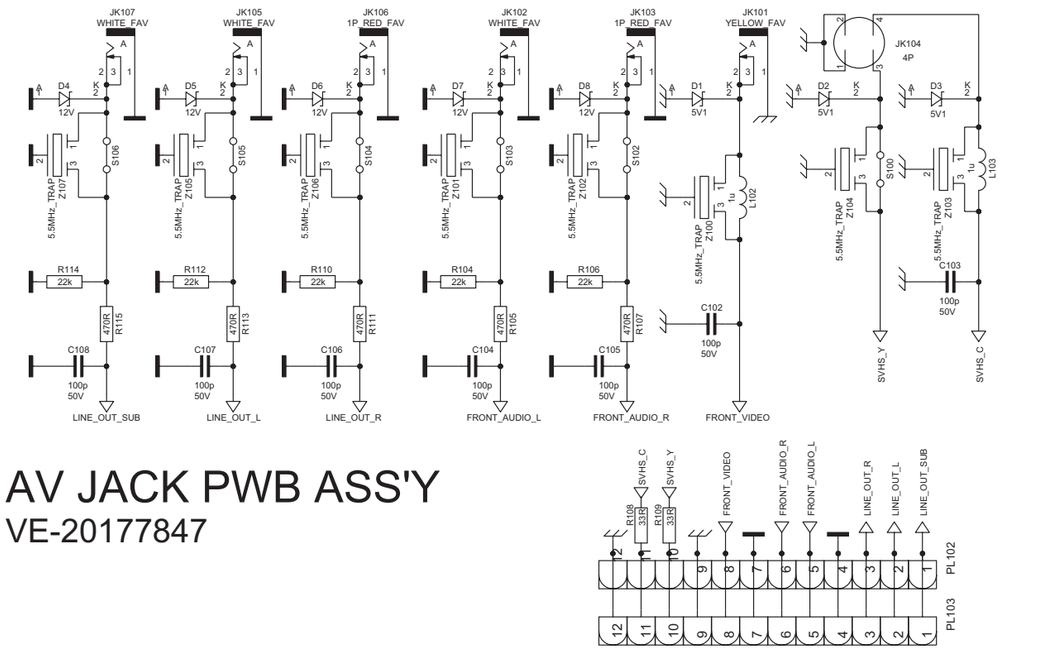
VE-20180595 [LT-23C50BU,LT-23C50BU/Z,
LT-23C50SU,LT-23C50SU/Z,LT-23C88SJ]

SIDE CONTROL PWB CIRCUIT DIAGRAM



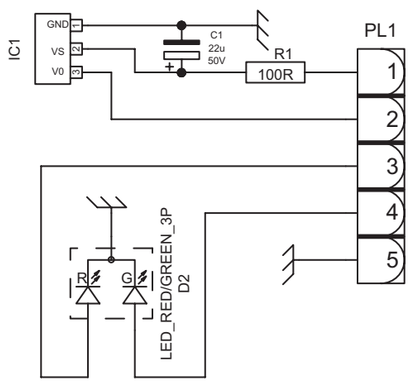
SIDE CONTROL PWB ASS'Y
VE-20174624

AV JACK PWB CIRCUIT DIAGRAM



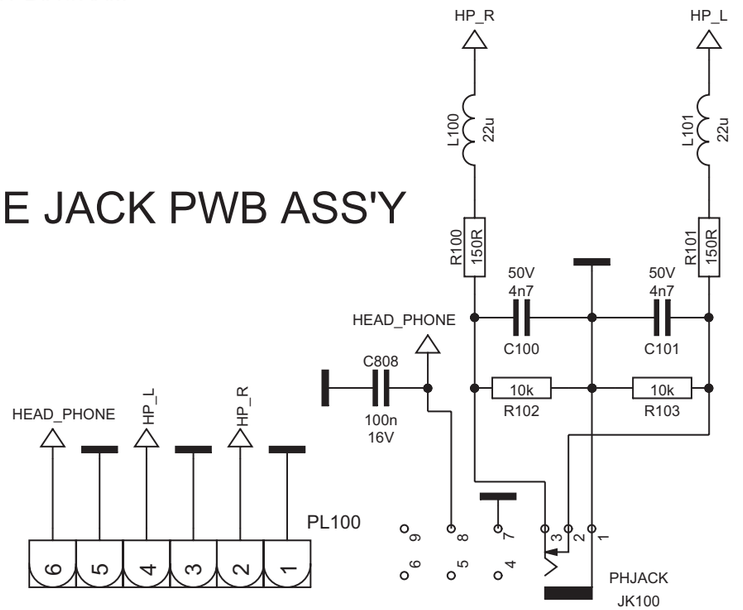
AV JACK PWB ASS'Y
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LED PWB CIRCUIT DIAGRAM



LED PWB ASS'Y
VE-20174629

HEADPHONE JACK PWB CIRCUIT DIAGRAM

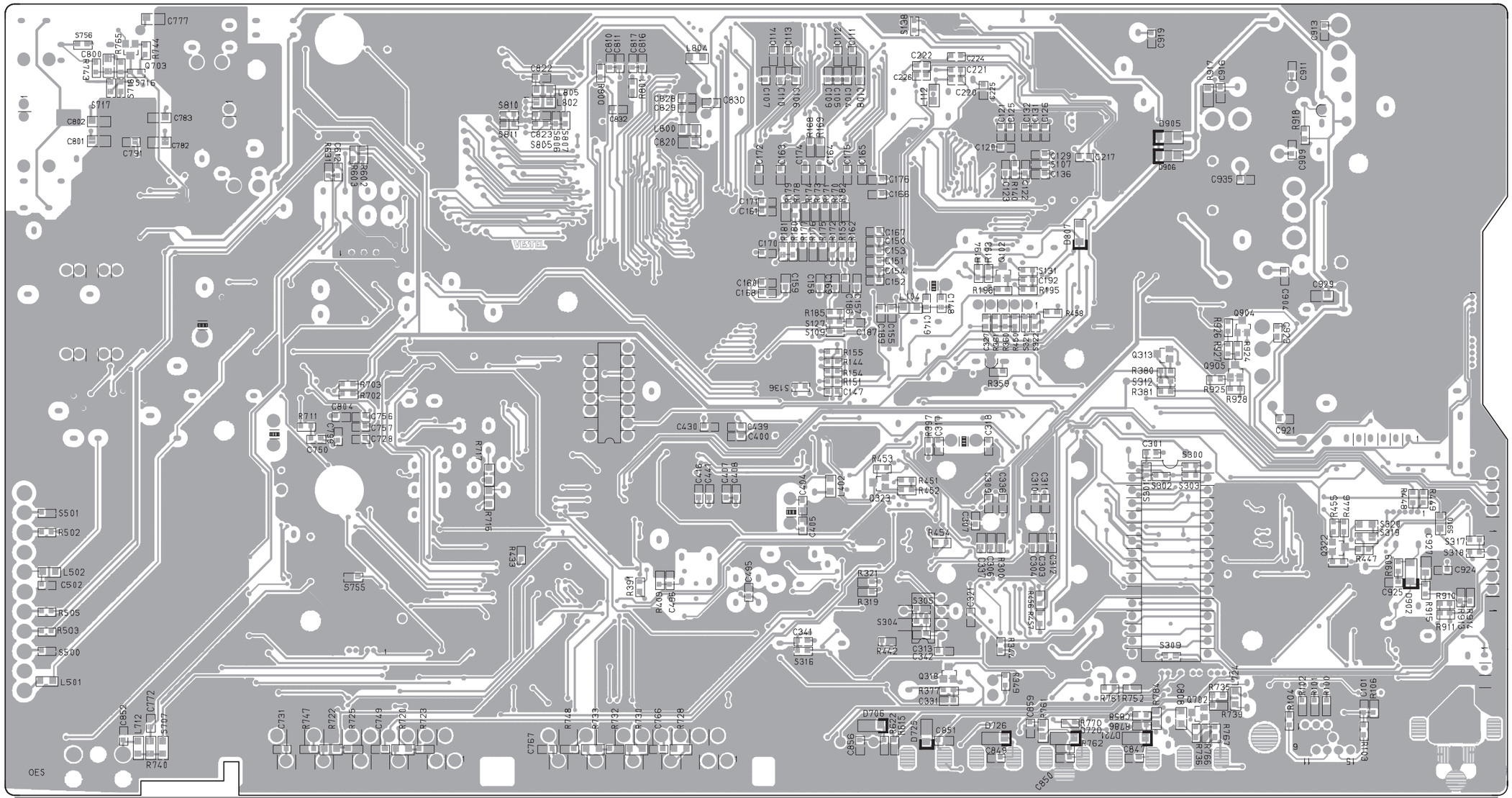


HEADPHONE JACK PWB ASS'Y
VE-20177874

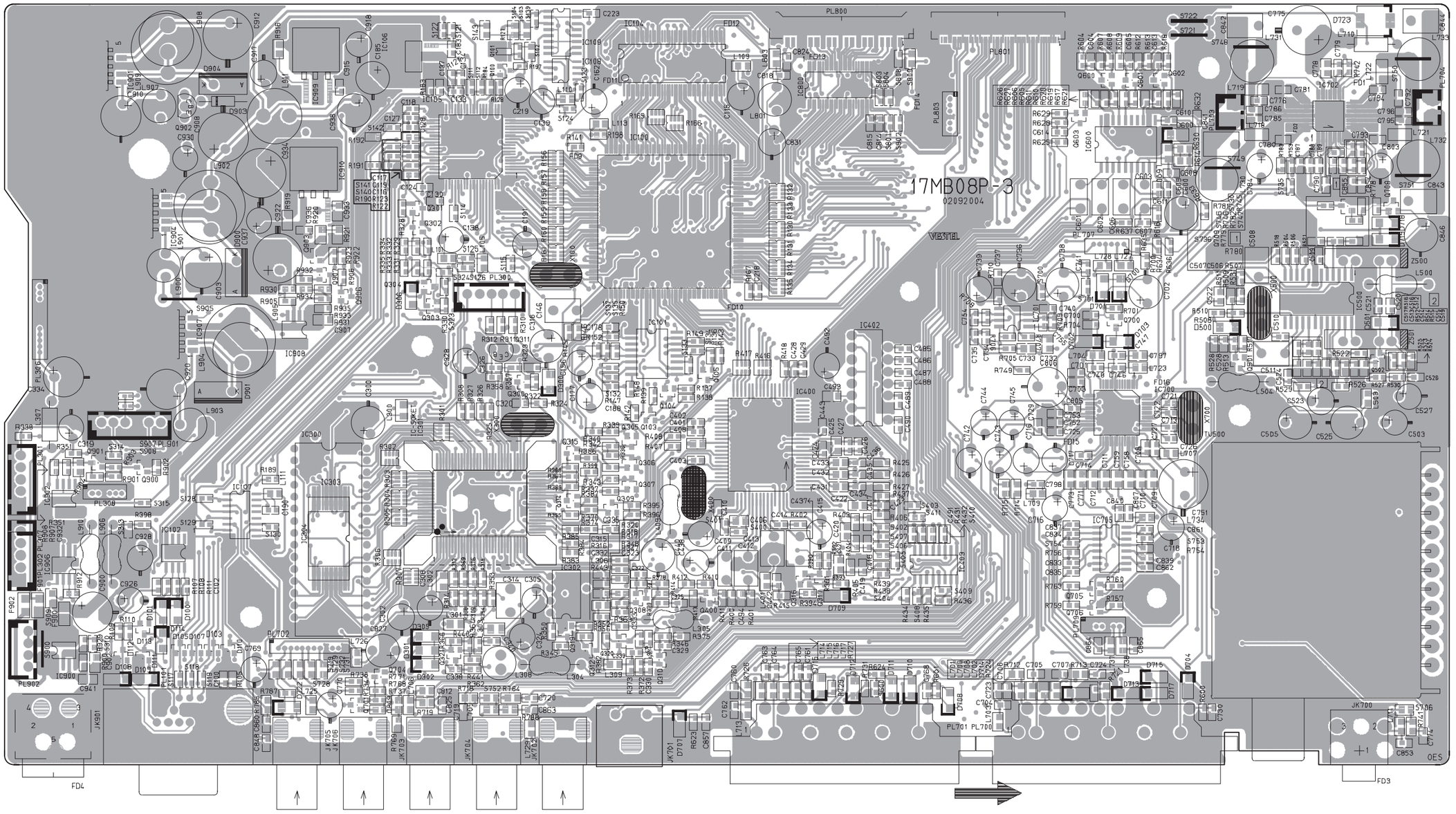
PATTERN DIAGRAMS

MAIN PWB PATTERN [SOLDER SIDE]

TOP

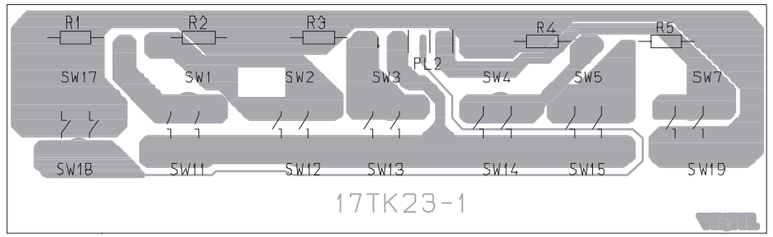


MAIN PWB PATTERN [PARTS SIDE]

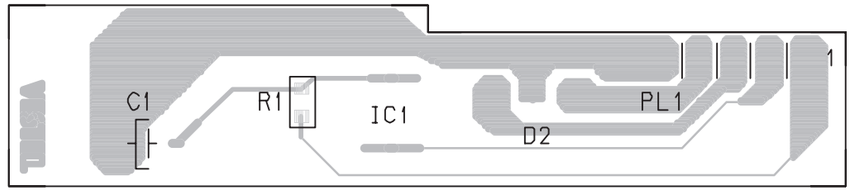


SIDE CONTEROL PWB PATTERN

TOP

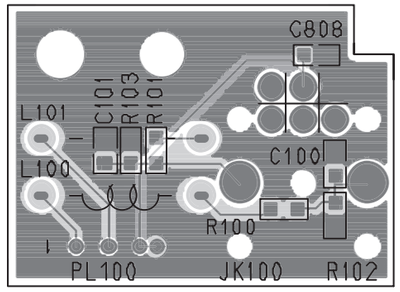


LED PWB PATTERN



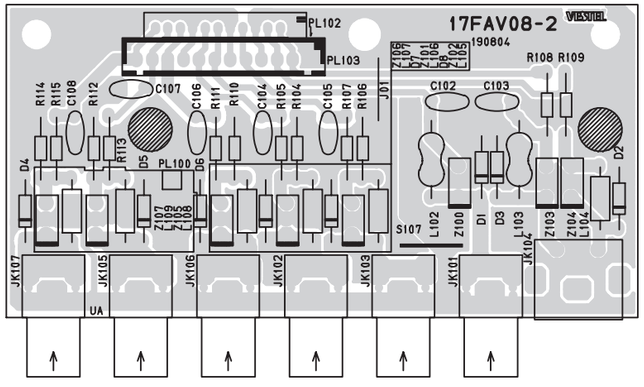
TOP

HEADPHONE JACK PWB PATTERN [SOLDER SIDE]



TOP

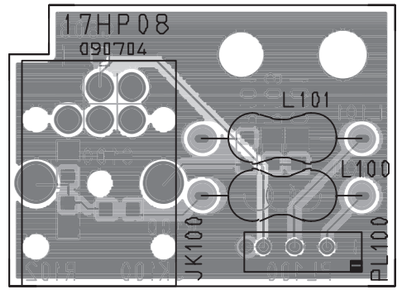
AV JACK PWB PATTERN



TOP

HEADPHONE JACK PWB PATTERN [PARTS SIDE]

TOP



JVC
Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY VIDEO DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YA220)

Printed in Japan
VPT

JVC

ENGLISH

InteríArt

LT-23C50BJ

WIDE LCD PANEL TV INSTRUCTIONS

JVC

©2004 VICTOR COMPANY OF JAPAN, LIMITED

50058107

1004MKH-VT-VT

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For your safety

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured. So, please read the points below for your own safety. They are of a general nature, intended to help you with all your electronic consumer products and some points may not apply to the goods you have just purchased.

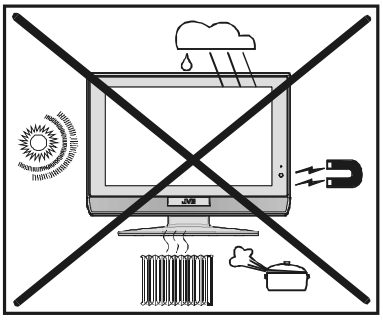
Some “DOs” and “DON’Ts” for you

Air Circulation…

Leave at least 10cm clearance around the television to allow adequate ventilation. This will prevent the TV from overheating and consequential possible damage to the TV. Dusty places should also be avoided.

Heat Damage…

Damage may occur if you leave the TV in direct sunlight or near a heater. Avoid places subject to extremely high temperatures or humidity, or locations where the temperature is likely to fall below 5ºC (41ºF).



Mains Supply…

The mains supply required for this equipment is **100-240 V AC, 50 Hz.** Never connect to a DC supply or any other power source. DO ensure that the TV is not standing on the mains lead. DO NOT cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance.

Hot / Moderate Climate Conditions

This device is suitable for working in hot and moderate climate conditions.

IF IN DOUBT PLEASE CONSULT A COMPETENT ELECTRICIAN.

DO…

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and inter-connections between pieces of equipment) are properly made and in accordance with the manufacturers' instructions.

Switch off and withdraw the mains plug before making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

DO NOT…

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T obstruct the ventilation openings of the equipment with items such as newspapers, table-cloths,

curtains etc. Overheating will cause damage and shorten the life of the equipment.

DON'T allow electrical equipment to be exposed to dripping or splashing or objects filled with liquids, such as vases, to be placed on the equipment.

DON'T place hot objects or naked flame sources, such as lighted candles or nightlights on, or close to the equipment. High temperatures can melt plastic and lead to fires.

DON'T use makeshift stands and NEVER fix legs with wood screws. To ensure complete safety, always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T listen to headphones at high volume, as such use can permanently damage your hearing.

DON'T leave equipment switched on when it is unattended, unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch the equipment off and make sure your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or it is damaged in any way – switch off, withdraw the mains plug and consult your dealer.

DON'T put the empty batteries into garbage instead of recycle bin to reduce harmfull effects to the environment.

ABOVE ALL – NEVER let anyone, especially children, push anything into holes, slots or any other openings in the case – this could result in a fatal electric shock.

NEVER guess or take chances with electrical equipment of any kind – it is better to be safe than sorry.

To fully disconnect the TV, switch off the mains socket and remove the Power plug.

Safety Precautions for Power adapter

- Be careful! May become hot.
- For indoor and dry location use only.
- Risk of electric shock.
- Shock hazard, do not open.
- Keep all power adapters away from any other heat source.
- Always use power adapter(s) well-ventilated area.

*** Cold cathode fluoresant lamp in LCD PANEL contains a small amount of mercury, please follow local ordinates or regulations for disposal.*

"The LCD panel is very high technology product with about a million thin film transistors, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product." Please note that certain light guns used with games consoles may not work on this product.

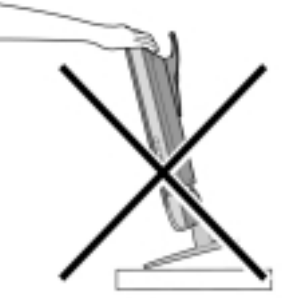
Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

WARNING

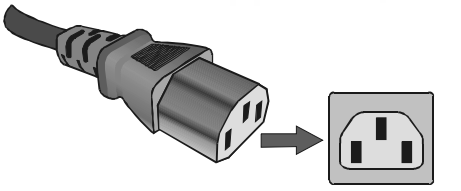
- *Fingers may be trapped under the TV causing injuries. Hold the TV at the bottom in the middle, and do not allow it to tilt up or down.*
- *The TV may fall causing injuries. Hold the bottom of the stand with your hand and tilt the TV up and down.*
- *Do not allow children to hang from the TV, place their elbows on the TV or lean against the TV. Doing so may cause the TV to fall over and lead to injuries.*





CAUTION:

- *To avoid electric shock or damage to the unit, first firmly insert the small end of the power cord into the AC Adapter unit it is no longer wobbly, and then plug the larger end of power cord into an AC outlet.*



Important Instruction

For your own safety read following instruction carefully before attempting to connect this unit to the mains supply.

MAINS (AC) OPERATION

The wires in this mains lead are coloured in accordance with the following code :

BLUE-NEUTRAL

BROWN-LIVE

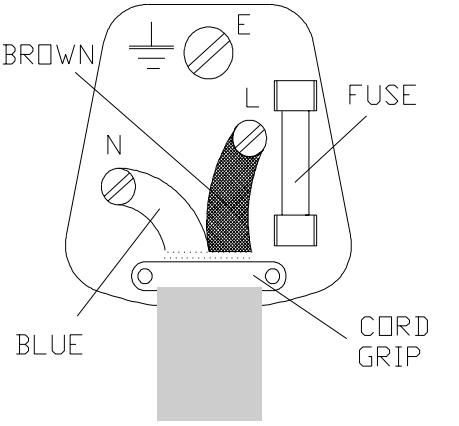
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

No connection is to be made to the earth terminal of the plug.

If a 13 Amp (BS 1363) Plug is used a 5 Amp Fuse must be fitted, or if any other type of Plug is used a 5 Amp Fuse must be fitted, either in the Plug of Adaptor, or on the Distribution Board.



CAUTION

TO PREVENT ELECTRIC SHOCK DISCONNECT FROM THE MAINS BEFORE REMOVING COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

SAFETY PRECAUTION

THIS EQUIPMENT MUST BE DISCONNECTED FROM THE MAINS WHEN NOT IN USE. DO NOT ALLOW THIS UNIT TO BE EXPOSED TO RAIN OR MOISTURE.

Important Information

Please take note

EXCLUSION CLAUSE

JVC shall under no circumstances be liable for loss and/or damage to the product caused by:

- fire;
- earthquake;
- accidental damage;
- intentional misuse of the product;
- use of the product in improper conditions;
- loss and/or damage caused to the product whilst in the possession of a third party;
- any damage or loss caused as a result of the owner' s failure and/or neglect to follow the instructions set out in the owner's manual;
- any loss or damage caused directly as a result of misuse or malfunction of the product when used simultaneously with associated equipment;

Furthermore, under no circumstances shall JVC be liable for any consequential loss and/or damage including but not limited to the following, loss of profit, interruption of business, the loss of recorded data whether caused during normal operation or misuse of the product.

WARNING! NEVER LEAVE A STATIONARY IMAGE ON THE SCREEN

If stationary images generated by TELETEXT, CHANNEL IDENTIFICATION LOGOS, COMPUTER DISPLAYS, VIDEO GAMES, ON SCREEN MENUS, etc. are left on the TV screen for any length of time, they could become permanently ingrained.

If you use your television to display completely still images, or moving pictures which have a permanent still image superimposed e.g. broadcast network logos, it is always advisable to reduce BOTH the brightness and contrast settings.

Care and disposal

Cleaning the screen and cabinet...

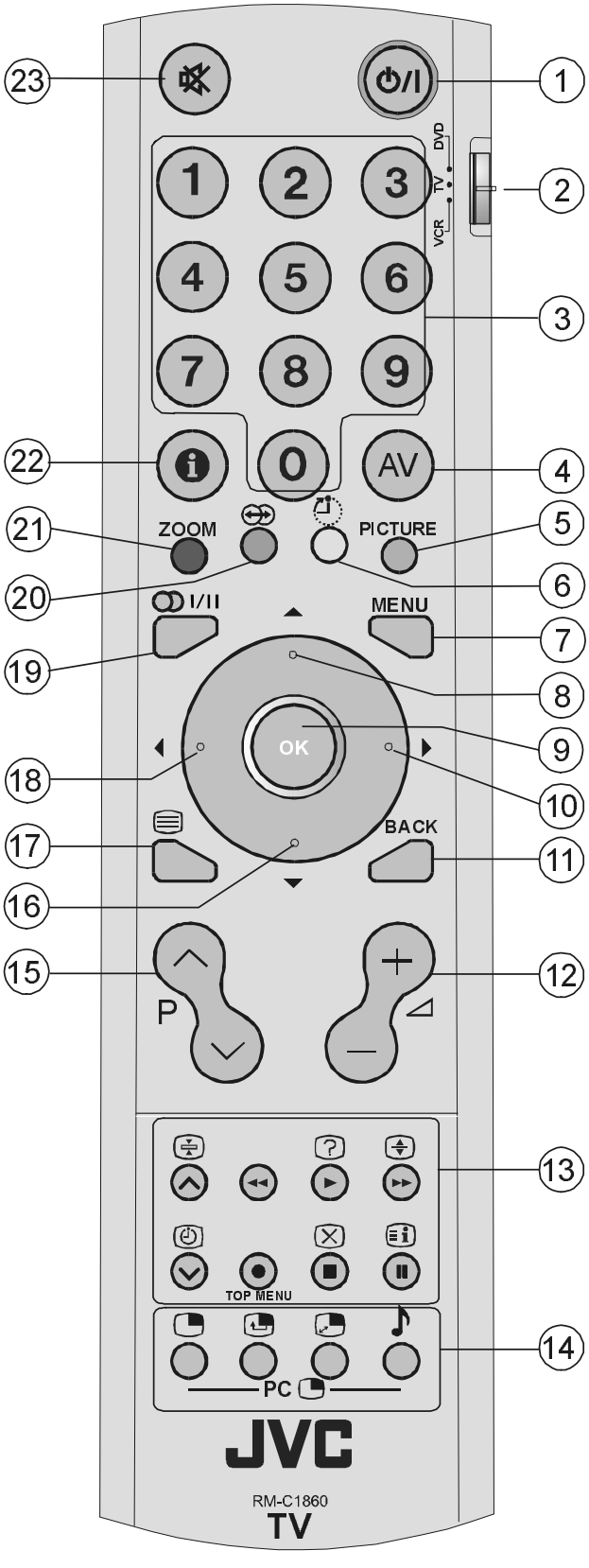
Turn off the power, clean the screen and cabinet with a soft, dry cloth. We recommend that you do not use any proprietary polishes or solvents on the screen or cabinet as this may cause damage.

Disposal...

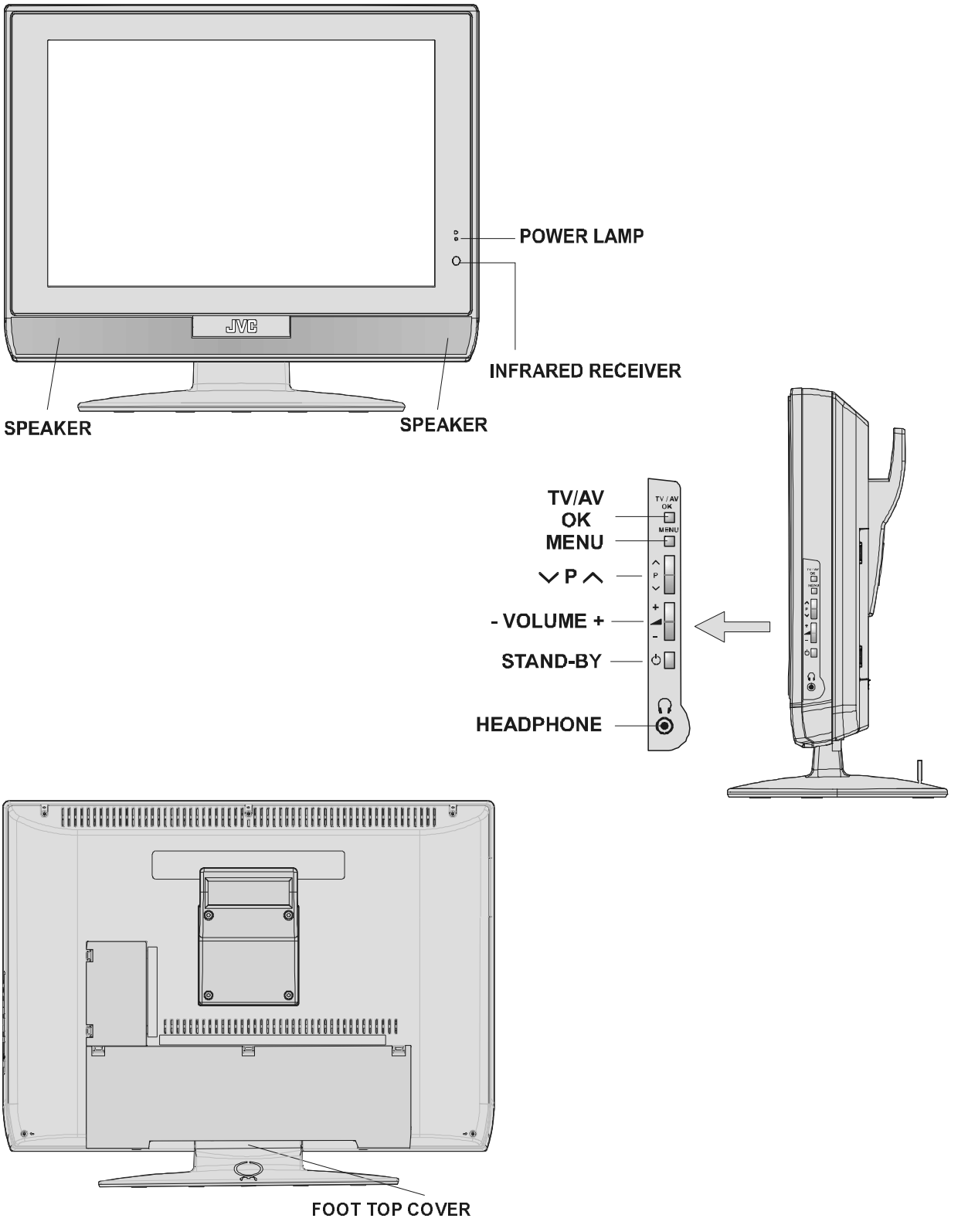
When the set reaches the end of its useful life please dispose of it in accordance with Local Government Regulations or at a recycling centre.

Remote Control Buttons

① ⏻ / I = (Stand By) button
② TV / VCR / DVD Switch
③ Number buttons
④ **AV** button (TV, EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S or PC)
⑤ **BLUE / PICTURE** Mode button
⑥ **YELLOW** / Sleep Timer button
⑦ **MENU** button
⑧ ▲ = Cursor Up button
⑨ OK button
⑩ ▶ = Cursor Right button
⑪ **BACK** button
⑫ = Volume + / - buttons
⑬ Teletext / VCR / DVD Control buttons
⑭ PC Control Buttons
⑮ P∧/∨ buttons
⑯ ▼ = Cursor Down button
⑰ = Teletext Button
⑱ ◀= Cursor Left button
⑲ I/II = Stereo / Bilingual button
⑳ **GREEN** / Hyper Sound On/Off button
㉑ **RED / ZOOM** Mode button
㉒ = Information Button / T-V Link in Program Menu
㉓ = Mute button



Control Panel Buttons



With certain combinations of connectors and leads the back cover may not be easily fitted. If the cover is left off, this in no way infringes safety requirements.

Using the stand

This TV comes with a Table Top Stand already attached.

This stand can be used to adjust the direction of the TV screen 5° up, 10° down, and 20° to the left or right.

Tilt the TV up and down:

While holding the bottom of the stand with one hand, use your other hand to hold the middle of the top of the TV and slowly tilt the TV up and down.

- As a safety measure, the stand is constructed so that it requires a certain amount of force to tilt the TV.



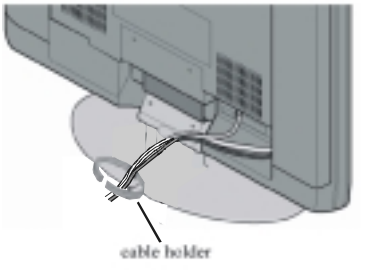
Rotate the TV to the left and right:

While holding the bottom of the stand with one hand, use your other hand to hold the odge of the panel and slowly adjust the direction of the TV screen.



Cable holder

A cable holder which is used to keep the connection cables tidy is attached to the back of the stand.

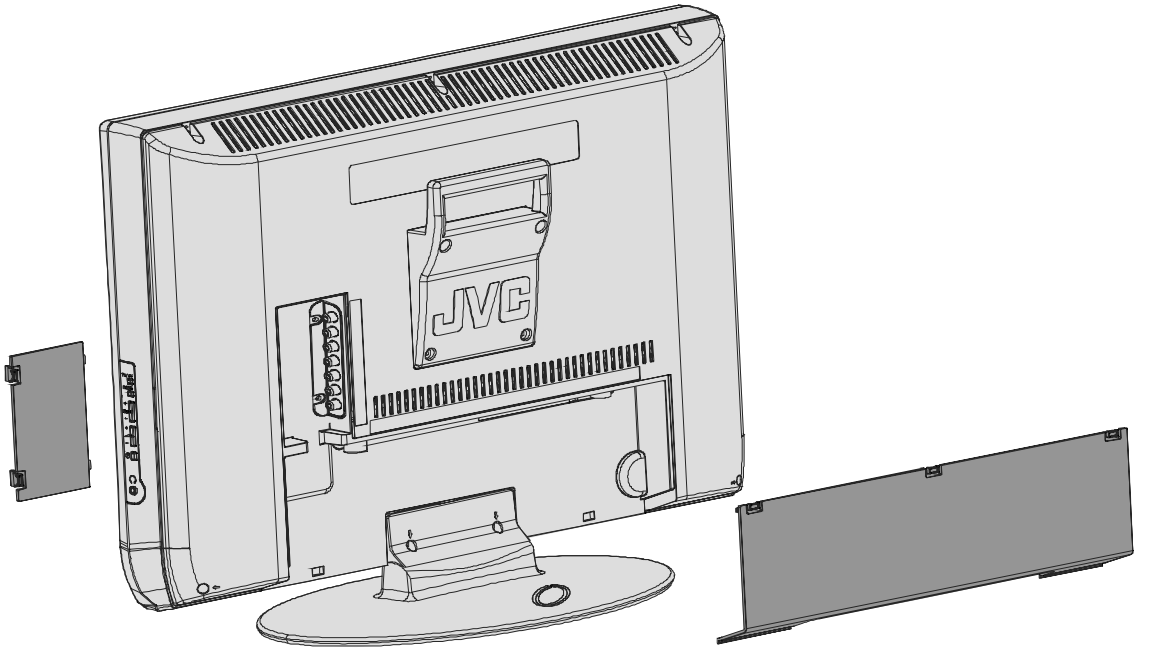


Remove the terminal Cover

There are connection terminals behind the covers of the rear of the TV. Remove the cover before connecting an antenna, DVD or VCR.

Remove the covers by removing the hooks. When replacing the covers, place the side or bottom of the covers against the TV and insert the hooks.

- Leave the covers off if they do not fit properly. DO NOT force to replace the covers. Doing so may cause damages of the connection cables and the covers.
- Leave these covers off when mounting the TV on a wall.



- 100 mm mount based on VESA regulation is equipped.
- The handle and the stand can be left by loosing the screws with a screwdriver when mounting the TV on a wall.
- Spread a soft cloth on a flat table and then place the TV on the cloth with the screen facing downwards when you leave the handle and the stand.

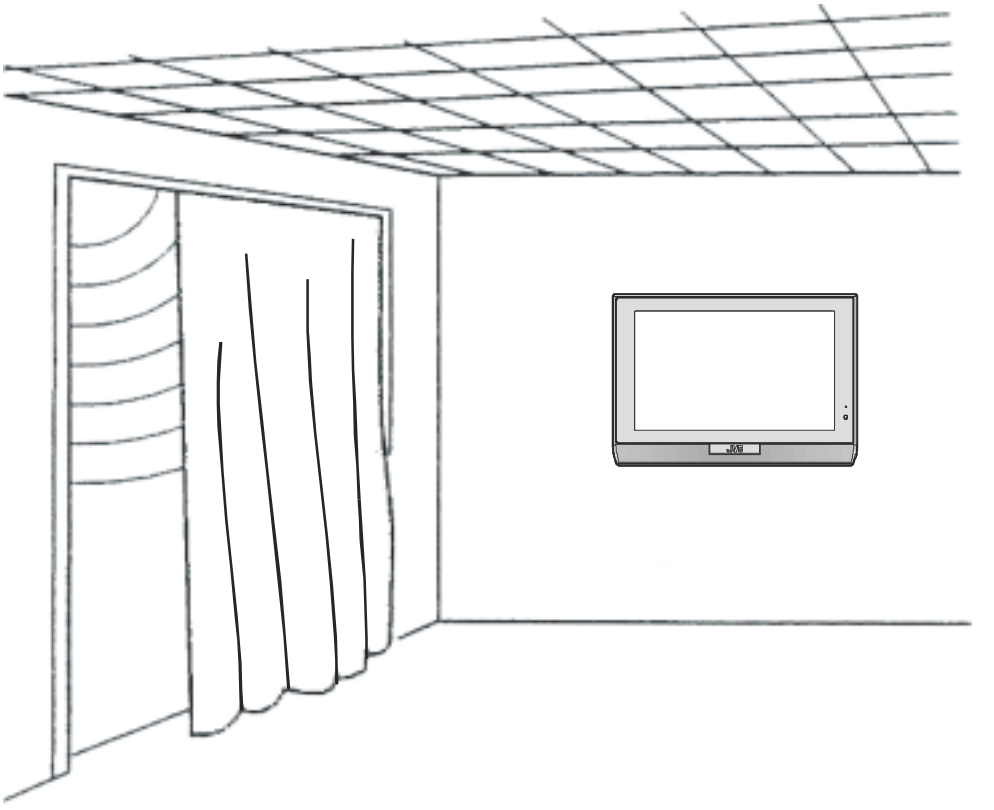
Where to install

Locate the TV away from direct sunlight and strong lights, soft, indirect lighting is recommended for comfortable viewing. Place on a sturdy platform, the mounting surface should be flat and steady, it should then be secured to the wall with a sturdy tie using the hook on the back of the TV, this will prevent it from falling over. Use curtains or blinds to prevent direct sunlight falling on the screen.

A floor and table top stand are available for this television, or and angled bracket which enables the TV to be wall-mounted.

The LCD display panels are manufactured using an extremely high level of precision technology, however sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

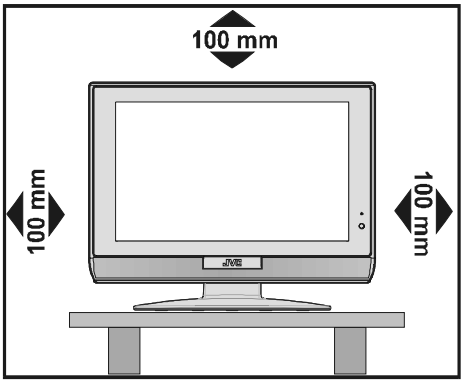
Make sure the TV is located in a position where it cannot be pushed or hit by objects, as pressure will break or damage the screen.



Preparation

Install Display on solid horizontal surface such as a table or desk.

For ventilation, leave a space of at least 10 cm free all around the set. To prevent any fault and unsafe situations, please do not place any objects on top of the set.



Features

- It is a remote controlled colour television and PC monitor.
- 100 programmes from VHF, UHF bands or cable channels can be preset.
- It can tune cable channels.
- Controlling the TV is very easy by its menu driven system.
- It has 2 pieces of Euroconnector socket for external devices (such as video, video games, audio set, etc.)
- To use as a PC monitor, 15 Pin Mini D-Sub connector for computer.
- Optional stereo sound systems (German or German+Nicam) are available.
- Multilanguage OSD.
- Teletext (Fastext, 7 pages).
- It is possible to connect headphone.
- A.P.S. (Automatic programming system)
- All programmes can be named.
- Forward or backward automatic tuning.
- Sleep timer.
- Child lock
- Auto, Full, Regular, Panoramic, 14:9 Zoom,16:9 Zoom,16:9 Zoom Subtitle modes.
- Automatic sound mute when no transmission.
- When no valid signal is detected, after 5 minutes the TV switches itself automatically to stand-by mode.
- NTSC Playback.
- Universal power supply range is a standard feature on this model.
- TV Picture in PC (if PC input available).
- PLL (Channel Search)
- PC input (Support Up to 1360 x 768)

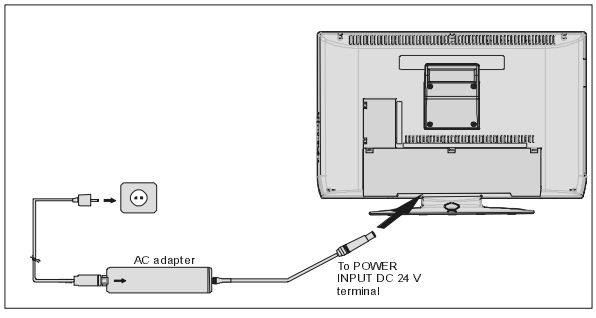
Panel Features

- High resolution, 23”-inch TFT LCD display.
- High contrast ratio (800:1 Typical)
- Brightness: 500 cd/$m^{2.}$
- High-speed response time < 25 msec.
- Wide viewing angle (typical) 170° (horizontal) and 170” (vertical).
- 8-bit colour depth, display 16.7 M colours.

Before Switching on your TV

Power connection

Only use the adaptor supplied with this product.

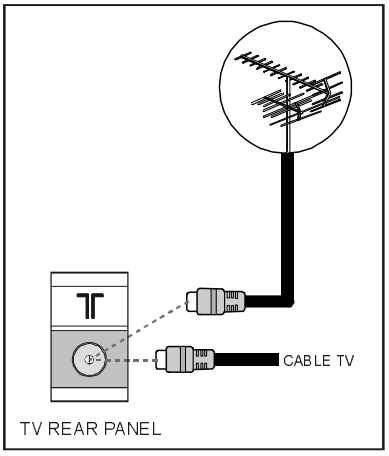


IMPORTANT: The TV set is designed to operate on **24 V DC. For this, an adaptor is used which gives 24 V DC voltage. Connect this adaptor to a system that supplies 100 -240V AC, 50 Hz.**

- After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

Connections to the RF input socket

• Connect the aerial or cable TV plug to the RF input socket located at the back of the TV and connect the cable plug coming out from the TV out socket located at the devices (VCR, DVB etc.) to this socket as well.



How to connect other devices

IMPORTANT: Switch off the TV before connecting any external device.

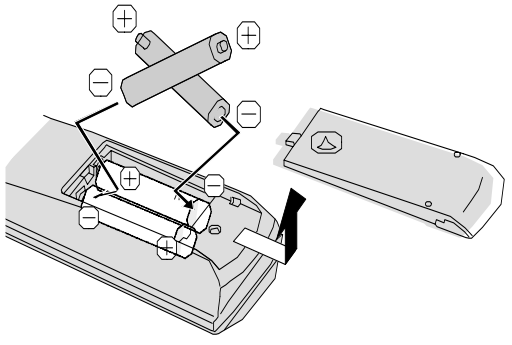
Sockets for external connections are at the back of the TV. For connection of other devices via Euroconnector refer to the manuals of the related devices.

Inserting batteries in the remote control handset

• Remove the battery cover located on the back of the handset by gently pulling upwards from the indicated part.

• Insert two AA/R6 dry cell or equivalent type of batteries inside.

• Replace the battery cover.



NOTE: *Remove the batteries from remote control handset when it is not to be used for a long period.Otherwise it can be damaged due to any leakage of battery.*

Old batteries must be disposed in a designated area. If performance of the remote control reduces, replace the batteries with the correct type. Do not combine a used, old battery or a new one or mixed battery types. Remove dead batteries immediately to prevent acid from leaking into the battery compartment.

Switching the TV ON/OFF

To switch the TV on

Your TV will switch on in two steps:

1- Connect the power supply cord to the system. Then the TV switches itself to stand-by mode and the power lamp becomes red located on the front of the TV.

2- To switch on the TV from stand-by mode either:

Press the "⏻" button on the remote control or on the right side of the TV

or.

press a digit button on the remote control so that a programme number is selected,

or,

Press **"P/Ch"** button on the right side of the TV or press **"P∨"** or **"P∧"** buttons on the remote control, so that last switched off programme is selected.

By either ways the TV will switch on and the power lamp will become green.

To switch the TV off

• Press the "⏻" button on the remote control or on the right side of the TV, so the TV will switch to stand-by mode and the power lamp will become red.

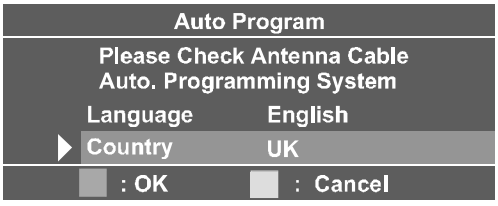
NOTE: To switch the TV off completely remove the mains plug from the socket.

Operating the TV

You can operate your TV both using the remote control handset and onset buttons.

First A.P.S. (Automatic Programming System)

APS, searches and sorts all channels and stores them automatically on your TV, according to the transmission of programme systems in your area.



To cancel APS before starting, press BLUE button.

First of all choose the "**Language**" which the menus of the TV will appear. As soon as you change the language, the menu items will be displayed in the selected language. . By pressing the " ▲" or " ▼" button, come to the "**Country**" item and select the country. This will effect the sort process in APS. Press red button to start A.P.S.

After APS is finalized, a programme list will appear on the screen. In the programme list you will see the programme numbers and names assigned to the programmes.

If you press the BLUE button at any time while the A.P.S. is running, the A.P.S. will be ended.

If you do not accept the locations and / or the programme names of programmes, you can change them in Program menu. For details see **Program Menu** on page 19.

If you do not have a T-V Link compatible VCR, press BLUE button to exit the menu.

If you have aT-V Link compatible VCR connected to the EXT-2 terminal, press " ℹ" button to display T-V Link menu. Then follow the operating procedure "**Downloading data to VCR**" in the following T-V Link section.

T-V Link

When a T-V Link compatible VCR connected to the EXT-2 terminal on the TV, it is easier to set up the VCR and to view videos. T-V Link uses the following features:

To use T-V Link functions

A "**T-V Link compatible VCR**" means a JVC video cassette recorder with the T-V Link logo, or with one of the following logos. For details see your VCR instruction manual.

"**Q-LINK**" (A trademark of Panasonic Corporation)

"**Data Logic**" (A trademark of Metz Corporation)

"**Easy Link**" (A trademark of Phillips Corporation)

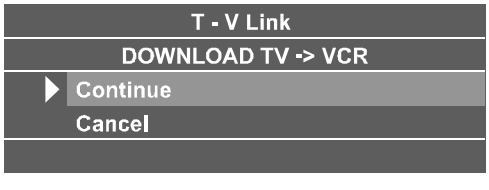
"**Megalogic**" (A trademark of Grundig Corporation)

"**SMARTLINK**" (A trademark of Sony Corporation)

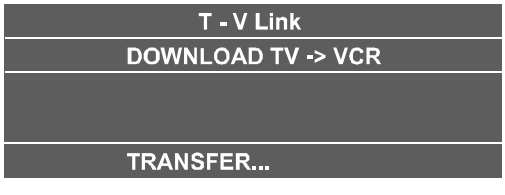
Downloading data to VCR:

The VCR will automatically download the registered data on the TV channels from the TV. This means you do not need to set up the programme channels on your VCR manually.

The "**T-V Link**" menu will be displayed when you press the " ℹ" button while **Program** menu is displayed.



Press "►" or "**OK**" button to start downloading data to VCR. "**TRANSFER**" is displayed in the menu



If you do not want to continue press the BLUE button to exit the menu.

If "**FEATURE NOT AVAILABLE**" is displayed,

download was not performed correctly. Before trying to download again, check that:

• The VCR power is turned on.

• The VCR is T-V Link compatible.

• The VCR is connected to the EXT-2.

• The scart cable is fully wired.

Direct REC:

You can easily record to VCR the images that you are watching on the TV. For details, read the manual for your VCR. Use your VCR controls you can not carry out Direct REC using your TV control.

When the VCR is not ready (For example when there is no tape inserted), "**NO RECORDING**" is displayed. In the following situations, the VCR will stop recording if the Tv is turned off, if the TV channel or input is changed, or if the menu is displayed on the TV:

• When recording images from an external device connected to TV (For example camcorder).

• When recording a TV channel after it has been unscrambled on a decoder.

• When recording a TV channel by using the TV's output because the VCR's own tuner can not properly receive that channel.

TV autopower on/VCR image view:

When the VCR starts playing, the TV automatically turns on and images from EXT-2 appear on the screen.

This function does not happen if your TV's main power is turned off. Set your TV's main power to on (StandBy Mode).

Operating the TV

You can operate your TV both using the remote control handset and onset buttons.

Volume setting and programme selection can be made by using the buttons at the control panel on the right side of the TV.

Volume Setting

• Press "◢ **-**" button to decrease volume or "◢ **+**" button to increase volume, so a volume level scale (slider) will be displayed at the middle of the bottom on the screen.

Programme Selection

• Press "**P**∧" button to select the next programme or "**P**∨" button to select the previous programme.

Entering Main Menu

• Press "**MENU**" button to enter Main menu. In the Main menu select submenu using "**P**∨" or "**P**∧" button and enter the submenu using"◢ **-**" or "◢ **+**" button. To learn the usage of the menus, refer to the Menu System sections.

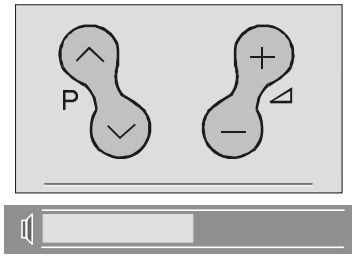
Operating with Remote Control

The remote control handset of your TV is designed to control all the functions of the model you selected. The functions will be described in accordance with the menu system of your TV.

Functions of the menu system are described in following sections.

Volume Setting

Press "◢ **+**" button to increase volume. Press "◢ **-**" button to decrease volume. A volume level scale (slider) will be displayed in the middle at the bottom of the screen.



Programme Selection (Previous or next programme)

- Press "**P**∨" button to select the previous programme.
- Press "**P**∧" button to select the next programme.

Programme Selection (direct access):

Press digit buttons on the remote control handset to select programmes between 0 and 9. TV will switch to the selected programme. To select programmes between 10 - 99, press the digit buttons consecutively which programme you want to select (eg. for programme 27, first press 2 and then 7). When it is late to press second digit button only the first digit programme will be displayed. The limit of the delay time is 3 seconds

.Example: PR6 → press 6, PR12 → press 1and 2 , PR123 → press 1,2 and 3.

Press directly the programme number to reselect single digit programmes.

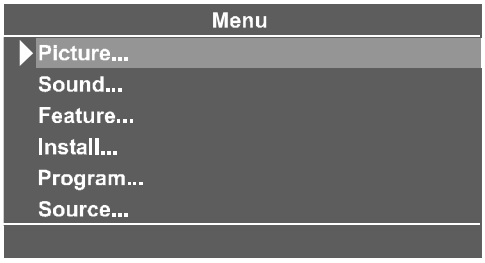
***Hint**: The channel list numbers are assigned by the broadcasters. Because not all channels are broadcast free-to-air and stored by the receiver, the channel list numbers do not run continuously. The fifteenth channel in the list, for example, may not be channel number 15 but channel number 17.*

Menu System

Your TV has been designed with a menu system to provide an easy manipulation of a multifunction system. The TV is controlled by choosing the commands, which are displayed on the screen.

MAIN MENU

Press the "**MENU**" button. The main menu will be displayed in the middle of the screen.



To select a sub-menu use "▲" or "▼" button, and press "◀" or "▶" button or directly press "**OK**" button.

In EXT-1, EXT-2 and EXT-4 modes, main menu appears the same as in TV mode but without Program sub-menu.

In EXT-3 mode, Main Menu appears as follows:



Menu does not disappear automatically if it is left on the screen.

Press "**MENU**" button again to remove menu.

Picture Menu

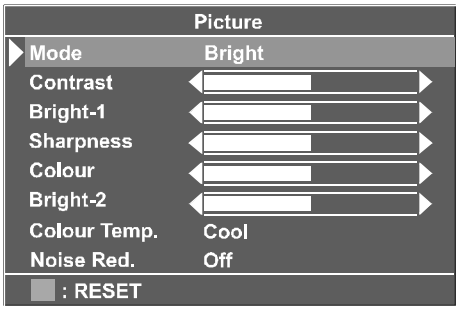
Press "**MENU**" button, now you are in main menu. In the Main menu, select "**Picture**" using "▲" or "▼" button, then enter the Picture menu pressing "◀" / "▶" or "**OK**" button.

Setting Mode

• As you enter the picture menu, Mode will be the first item.

• By pressing "◀" or "▶" button you may choose one of these options:

Soft, **Standard** and **Bright**.

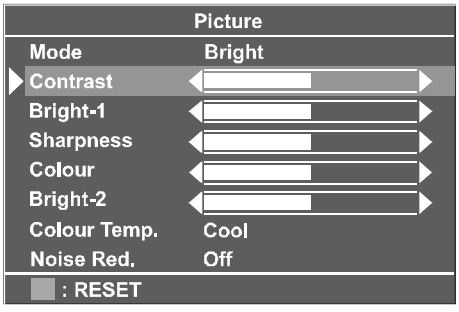


Setting Contrast

• Using "▲" or "▼" button select Contrast.

• Press "▶" button to increase contrast level.

• Press "◀" button to decrease contrast level.

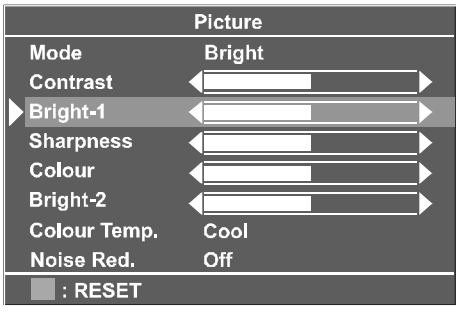


Setting Bright-1

• Using "▲" or "▼" button select Bright-1.

• Press "▶" button to increase brightness.

• Press "◀" button to decrease brightness.

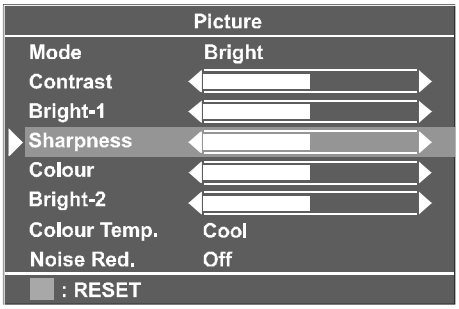


Setting Sharpness

• Using "▲" or "▼" button select Sharpness.

• Press "▶" button to increase sharpness level.

• Press "◀" button to decrease sharpness level.

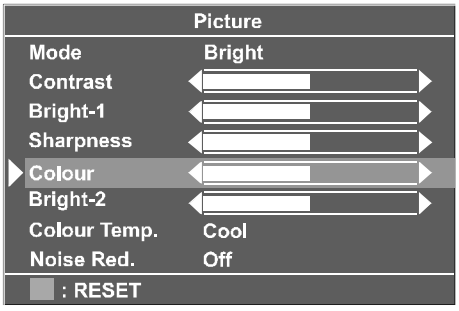


Setting Colour

• Using "▲" or "▼" button select Colour.

• Press "▶" button to increase colour level.

• Press "◀" button to decrease colour level.

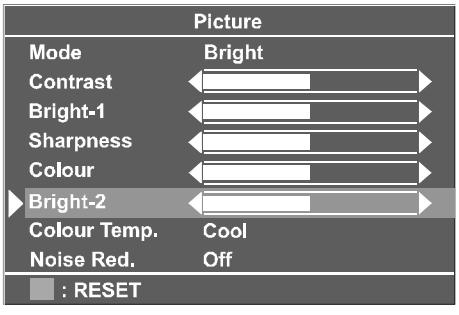


Setting Bright-2

Using"▲" or "▼" button select Bright-2.

• Press "▶" button to increase the back light.

• Press "◀" button to decrease the back light.



Setting Colour Temp.

• Using "▲" or "▼" button select Colour Temp.

• Press "◀" or "▶" button to select "**Warm**", "**Cool**" or "**Normal**".

Setting Noise Reduction

• Using " ▲ " or " ▼ " button select Noise Reduction.

• Press " ◀ " or " ▶ " button to select Noise Reduction level "**Off**" or "**Minimum**" or "**Medium**" or "**Maximum**

Note 1:

At low signal level, the changings on the Noise Reduction function are not effective when there is menu on the screen. If the menu is removed, the effect of this function is seen. At normal broadcasting, Noise Reduction changings are effective at once.

Note 2:

At moving pictures, while Noise Reduction is at maximum level, some picture distortions may occur. If Noise Reduction is set to medium or minimum, the picture will improve.

Setting Hue

During Playback NTSC system, this will appear in AV mode only when NTSC video source is applied. Otherwise, HUE option is invisible in Picture menu in TV mode :

• Using " ▲ " or " ▼ " button select Hue.

• Press " ▶ " button to increase hue level.

• Press " ◀ " button to decrease hue level.

Center value is indicated with one arrow.

Reset

Press BLUE button to reset the picture modes to factory default settings.

To Store the Settings

In the Picture Menu, all settings are stored automatically.

Sound Menu

To change sound settings

As you enter the main menu, sound will be the second item. In the main menu, select **Sound** using " ▲ " or " ▼ " button, then enter the sound menu pressing " ◀ " / " ▶ " or **"OK"** button.

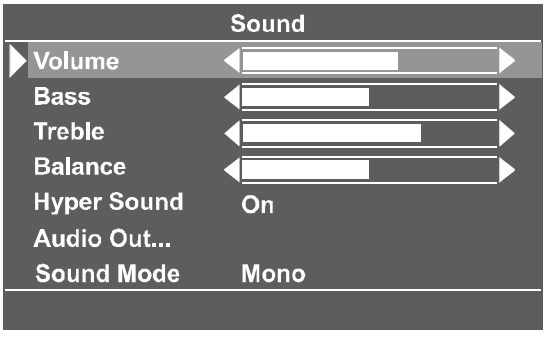
Setting Volume:

As you enter the sound menu, Volume will be the first selected option.

• Press " ▶ " button to increase volume.

• Press " ◀ " button to decrease volume.

Or you can directly change the volume settings using " ◢ **+**" (to increase) or "**-** ◢" (to decrease) button.



Setting Bass Level

• Using " ▲ " or " ▼ " button select Bass Level.

• Press " ▶ " button to increase bass level.

• Press " ◀ " button to decrease bass level.

Setting Treble Level

• Using " ▲ " or " ▼ " button select Treble

• Press " ▶ " button to increase treble level.

• Press " ◀ " button to decrease treble level

Setting Balance

It allows adjusting the distribution between the left and right speakers.

• Using " ▲ " or " ▼ " button select Balance.

• Press " ▶ " button to change balance rightward.

• Press " ◀ " button to change balance leftward.

Hyper Sound

• Using " ▲ " or " ▼ " button select Hyper Sound

• Pressing " ◀ " or " ▶ " button will turn on or off this feature.

Pseudo/spatial effect can be turned on or off via the Hyper Sound item in the Sound menu or by remote control. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels. Hyper Sound selection will be displayed on the

screen when the TV Status button is pressed or programme is changed.

To Change Audio Out Settings

Audio Out is a sub-menu of Sound menu.

Use this settings to adjust volume for audio out terminal which is located at the right side of the TV.

- Using " ▲ " or " ▼ " button select Audio Out.
- Press " ◀ " or " ▶ " button or directly press "**OK**" button on Audio Out, to enter the Audio Out menu.



Audio Out Volume

- As you enter the Audio Out sound menu, Volume will be the only option.
- Press " ▶ " button to increase volume.
- Press " ◀ " button to decrease volume.

Selecting Sound Mode

- Using " ▲ " or " ▼ " button select Sound Mode.
- Press " ◀ " or " ▶ " button to change Sound Mode.

You can choose **Mono**, **Stereo** or **Dual (I-II)** mode, only if the selected channel supports that Sound mode.

You can also change sound mode directly pressing "**I-II**" button on your remote control.

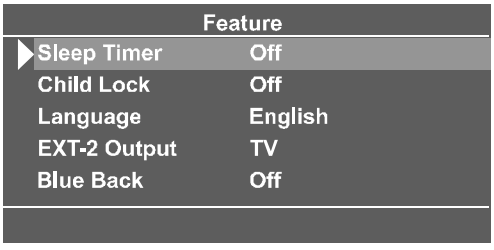
In case of bilingual broadcast (Dual Sound), you can select original or dubbed language using mode option.So when somebody listens to the original language from the loudspeakers, somebody else can listen to the dubbed language from headphone.

To Store The Settings

In the Sound Menu, all settings are stored automatically.

Feature Menu

Press "**MENU**" button, now you are in mainmenu. In the main menu, select **Feature** using " ▲ " or " ▼ " button. Then enter the Feature menu pressing " ◀ " / " ▶ " or "**OK**" button.



Sleep Timer

The Sleep Timer is used to turn the TV off after a defined period of time after selecting this item. The timer can be programmed between Off and 120 minutes in steps of 10 minutes. (Off, 010, 020, 030, 040, ... , 120)

If sleep timer is activated, at the end of the selected the time, the TV goes automatically to stand-by mode.

Child Lock

You can use this feature to prevent children turning on/off TV or changing programmes or adjustments etc. without remote control.

- Using " ▲ " or " ▼ " button select Child Lock.
- Press " ◀ " / " ▶ " button to select Child Lock **On** or **Off**.

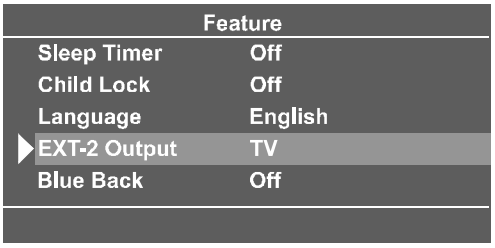
The **Child Lock** feature can be set **On** or **Off** by " ◀ " / " ▶ " button. When **Off** is selected, there will be no difference in the operation of your TV. When **On** is selected, the TV can only be controlled by the remote control handset. In this case the control panel buttons except "⏻" button on the right side of the TV will not work.

Selecting Menu Language

- Using " ▲ " or " ▼ " button select Language.
- Press " ◀ " or " ▶ " button to select menu language.

EXT-2 Output

From EXT-2 Output; **TV**, **EXT-1** or **EXT-4** can be given. These modes can be chosen by pressing " ◀ " or " ▶ " button on "**EXT-2 Output**".



Blue Back (During No Signal)

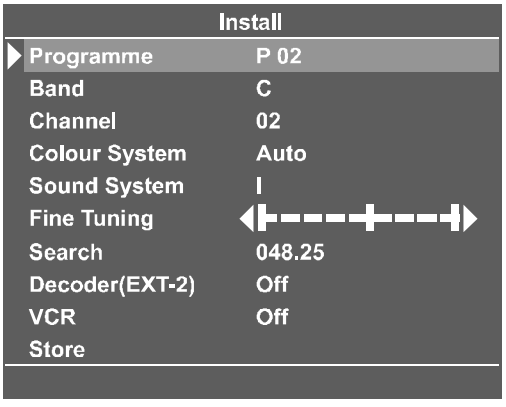
The Blue Back Feature can be set by " ▲" or "▼" button to either On or Off.

To Store Settings

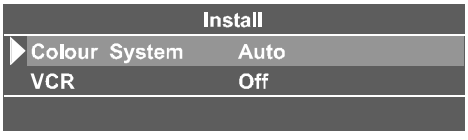
In Feature menu all settings are stored automatically.

Install Menu

Press "**MENU**" button, now you are in main menu. In the main menu, select "**Install**" using ▲" or "▼" button. Then enter the Install menu pressing"◀" / "▶" or "**OK**" button.



In EXT mode, Install menu appears like this:



You can change only Colour system and VCR.

Selecting Programme

- Using " ▲" or "▼" button select Programme.
- To select programme number, you can use "◀" / "▶" button or Digit Buttons

Selecting Band

Band, can be chosen either,

- "C" or "S" by "◀" or "▶" button.

Selecting Channel

Channel can be changed by "◀" or "▶" button or by Digit Buttons.

Selecting Colour System

Using "◀" or "▶" button on **Colour System**, you can change the colour system to **PAL, SECAM** or **Auto**.

Note: In EXT mode, you can choose NTSC 3.58 and NTSC 4.43 as well.

Selecting Sound System

Using "◀" or "▶" button on **Sound System**, you can change the standard to **BG, DK, I, L, Lp**.

Selecting Fine Tuning

You can use the Fine Tuning process for fine adjustment (after coarse adjustment), if you are not happy about the image on the screen.

Use "◀" or "▶" button on **Fine Tuning** item, until getting the best image on the screen.

Selecting Search

To start the search process, press "▶" button for forward search or "◀" button for backward search. If a signal is found or reaches to end of the band after searching, press "◀" or "▶" buttons to continue search process. To stop the search process when you want, press "◀" or "▶" buttons at any time.

Decoder (EXT-2)

You can use this mode to connect any decoder to your TV.

- Press the"◀" or "▶" buttons to set it "**On**" or "**Off**".

When you select Decoder(EXT-2) "**On**", EXT-2 output will be chosen as TV mode only and any scrambled channels will be unscrambled through decoder connected your TV via EXT-2 output.

Setting VCR (Video Cassette Recorder) Mode

- This item can be seen in **TV, EXT-1**, **EXT-2**, **EXT-3** and **EXT-4** modes.

• If you want to watch a **VCR** source from one of these modes, then it will be better to set **VCR** mode "**On**". For this, while the cursor is on this item press the"◀" or "▶" buttons to set it "**On**".

• If you want to watch a **DVD** , then you must set this item "**Off**"; because **DVD** is not a source like a **VCR** and to see the picture better, you must set the **VCR** mode "**Off**".

To Store Settings

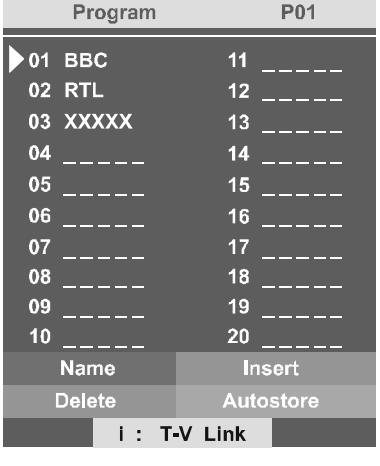
• Press "◀" / "▶" or "**OK**" button on **Store** option to store Install menu settings.

• After stored, T-V Link menu will appear. If you do not need to do T-V Link, press BLUE button to exit the menu.

Program Menu

Press "**MENU**" button, now you are in main menu. In the main menu, select "**Program**" using "▲" or "▼" button. Then enter the Programme menu, press "◀" / "▶" or "**OK**" button.

Note: There is no Program menu in any EXT modes.



Program Menu is used to delete a channel, to change the programme number of a channel, to give a channel name to a channel, and to start the A.P.S (Autostore) function.

To choose a channel in the PROGRAM menu

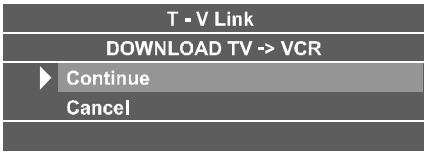
Press "▲" / "▼" / "◀" / "▶" button. The programme number that you choose is highlighted in the Program.

Caution:

Using "Delete" or "Insert" function rewrite the current channel list in the Program menu. Therefore, the programme numbers of some of channels will change.

When you complete the settings of Program menu:

If you have a T-V Link compatible VCR, press "ⓘ" button to display the T-V Link menu. then follow the operating procedure "**Downloading the data to VCR**"



If you do not have a T-V Link compatible VCR, press BLUE button to exit the menu.

To give a channel name (Name):

1. Choose the channel you want to give a channel name.
2. Press the RED button to enter the Namemode.
3. Press "◀" or "▶" button to choose the position,and press "▲" or "▼" button to choose each character of channel name.
4. Press the RED button to store the channel name.

• To cancel the Name mode, press the BLUE button.

To delete a channel (Delete):

1. Choose the channel you want to delete.
2. Press the YELLOW button to enter the Delete mode.
3. Press the YELLOW button to delete it.

• To cancel the Delete mode, press the BLUE button.

To change the programme number of a channel (Insert)

1. Choose the channel you want to change the programme number.
2. Press the GREEN button to enter the Insert mode.
3. Press "▲" / "▼" / "◀" / "▶" button to choose new programme number.

4. Press the GREEN button to insert the channel to the chosen programme number.

Autostore:

To enter Autostore menu, press the BLUE button. To learn the features of this function see "**Autostore**" below.

Autostore, searches and stores all channels automatically on your TV, according to the transmission of programme systems in your area.



First of all choose the "**Country**" by using "◀" or "▶" button.

After Autostore is finalized, a programme list will appear on the screen. In the program list you will see the programme numbers and names assigned to the programmes.

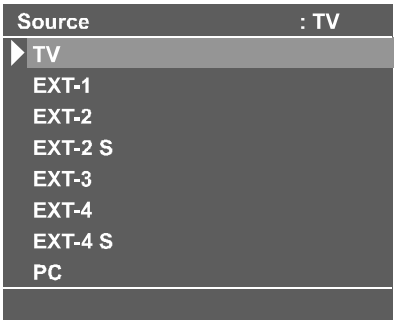
If you do not accept the locations and/or the programme names of programmes, you can change them in Programme menu.

Source Menu

You can switch your TV to EXT modes by pressing directly to "**AV**" button or by selecting in source menu from the main menu.

While in EXT mode, you can also switch your TV to TV or other EXT modes by selecting in source menu from the main menu.

In main menu, firstly use "▲" or "▼" button then use "◀" / "▶" or "**OK**" button to enter Source menu. In source menu, move the cursor by "▲" or "▼" button and then press "**OK**" button or "◀" / "▶" buttons when the cursor is on the required item. The selected mode comes automatically on the screen.



Other Features

TV Status

Programme Number, **Programme Name** (or **EXT**), (they are displayed on the upper left of the screen). The **sound indicator** is displayed with them too. They are displayed after programme change during 3 seconds.

Sound Indicator

The alternatives of the indicator are Mono, Stereo, Dual I and Dual II. This indicator is displayed under the programme number indicator on the screen. "**I-II**" button is used to select Mono or Stereo, or Dual I or Dual II.

Mono

In Mono broadcast or in forced-mono (for stereo broadcast).

Stereo

In Stereo broadcast.

Dual I

If dual broadcast detected. Dual I is selected in default and also can be selected after Dual II by Remote Control.

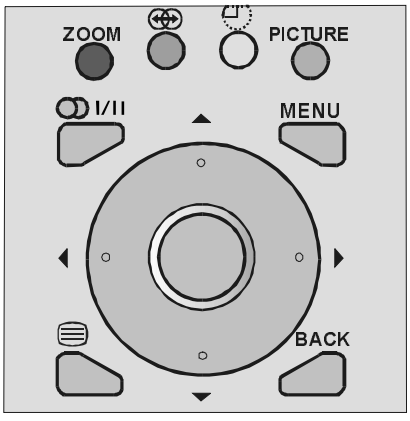
Dual II

If Dual II selected by Remote Control.

Hyper Sound

By selecting Hyper Sound in sound menu or by pressing the "⊕" button on your remote control, Pseudo/Spatial effect can be turned on or off. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels. Hyper Sound selection will be displayed on the screen when the TV Status button is pressed or programme is changed.



Picture Mode

Picture mode OSD is displayed when BLUE button is pressed. Picture mode can be changed to standard, soft, and bright.

Sleep Timer

Sleep Timer mode OSD is displayed when YELLOW button is pressed.

The Sleep Timer is used to turn the TV off after a defined period of time after selecting this item. The timer can be programmed between Off and 120 minutes in steps of 10 minutes. (Off, 010, 020, 030, 040, ... , 120)

If sleep timer is activated, at the end of the selected the time, the TV goes automatically to stand-by mode.

Mute Indicator

It is placed in the upper middle of the screen when enabled, and it stays there until it is disabled.



To cancel mute, there are two alternatives; the first one is by pressing the "🔇" button, this volume is set to the preceding value, and the second one is increasing the volume level. By decreasing the volume level in mute state, mute will not be ignored, only the volume level will decrease.

No-Signal Detection (TV mode)

If no valid signal detected, it takes 5 minutes to switch to the Stand-By mode unless any signal detected or any Remote Control command is accessed.

After a Remote Control command (if No-Signal Timer is active) the timer stops and if no signal detected again the timer is initialized to 5 minutes and starts 3 seconds later again to count down.

It is not valid in EXT modes.

No-Signal and Out Of Range Detection (PC mode)

In PC Mode,as no menu is displayed,in case that there is no PC input to the TV,it is displayed an OSD message:

No input signal detected

then the power lamp turns to amber and PC will be in PC standby mode. Press "**AV**" button, digit buttons or "**P∨**" / "**P∧**" buttonsto exit standby mode.

In PC Mode,as no menu is displayed,in case that there is no PC input to the TV, but the resolution and the vertical frequency is not supported by the concept, it is displayed an OSD message:

Signal out of range

Volume Bar

It is displayed in the lower middle of the screen. When a volume command is received (pressing **"◢ +"** or **"◢ -"** by Remote Control or Control panel at the top of the TV) and no menu is active, it stays on the screen for 3 seconds, after the last volume command or until another command is received in between.



EXT Modes

By pressing the "**AV**" button you can switch your TV to EXT modes (except being in Teletext). Pressing this button will consecutively switch the TV in one of the optional EXT modes: **EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S** and **PC**.

In order to quit the EXT mode press any digit buttons or **"P∨"** or **"P∧"**

Zoom Modes

Zoom mode can be changed by pressing Red button. You can change the screen size according to the picture aspect ratio. Select the optimum one from the following **ZOOM** modes.

AUTO:

When a **WSS (Wide Screen Signalling)** signal, which shows the aspect ratio of the picture, is included in the broadcast signal or the signal from an external device, the TV automatically changes the **ZOOM** mode to **16:9 ZOOM** mode **PANORAMIC** or **FULL** mode according to the **WSS** signal.

- When the **AUTO** mode does not function correctly due to poor **WSS** signal quality or when you want to change the **ZOOM** mode, change to another **ZOOM** mode manually.

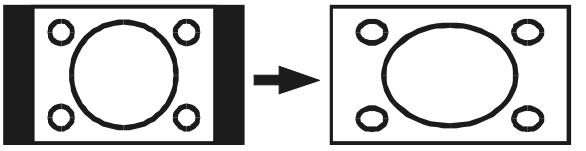
Using the different screen formats

Press the Red button to select the different modes: **AUTO,FULL, REGULAR, PANORAMIC, 14:9 ZOOM, 16:9 ZOOM, 16:9 ZOOM SUBTITLE** modes.

Note: *You can only choose REGULAR and FULL in PC mode*

FULL:

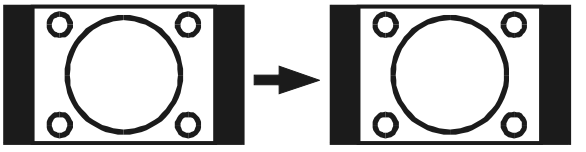
This uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.



- For 16:9 aspect ratio pictures that have been squeezed into a normal picture (4:3 aspect ratio), use the **FULL** mode to restore the picture to its original shape.

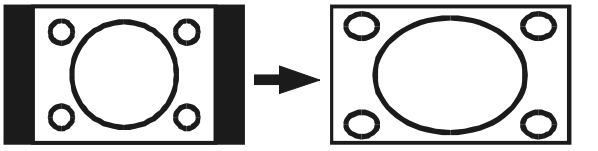
REGULAR:

Use to view a normal picture (4:3 aspect ratio) as this is its original shape.



PANORAMIC:

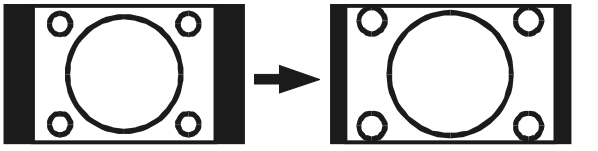
This stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the screen, without making the picture appear unnatural.



The top and bottom of the picture are slightly cut off.

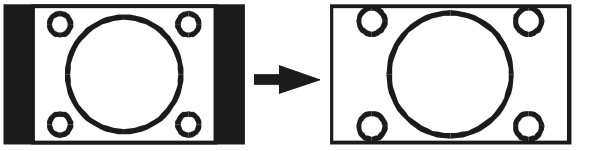
14:9 ZOOM:

This zooms up the wide picture (14:9 aspect ratio) to the upper and lower limits of the screen.



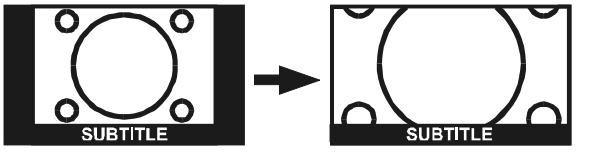
16:9 ZOOM:

This zooms up the wide picture (16:9 aspect ratio) to the full screen.



16:9 ZOOM SUBTITLE:

This zooms up the wide picture (16:9 aspect ratio) with subtitles to the full screen.

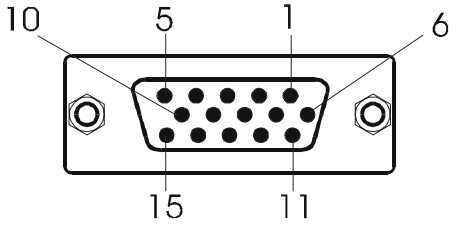


PC Mode

Installation

- Power off both Computer and Display before making any connections.
- Set your PC's resolution correctly before connecting to the TV. See the table in page 30 for supported modes.
- Use a D-SUB cable to connect the TV's PC input to the computer's RGB output terminal. If you want to listen to the sound from the computer, use an audio cable to connect the PC AUDIO IN to the computer's sound output terminal.

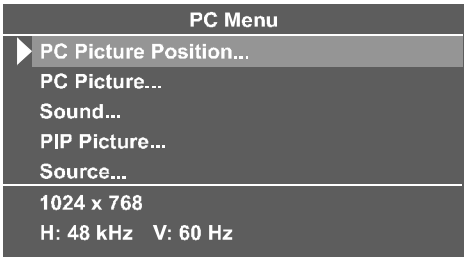
15 Pin Mini D-Sub Connector



- Tighten the screws of the Display cable until the connectors are fastened securely (finger-tighten only).

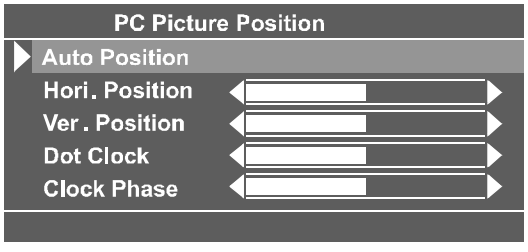
Main Menu in PC mode:

Enter the main menu by pressing the "**MENU**" button on the remote control.



PC Picture Position Menu:

In the Main menu, select "**PC Picture Position**" using "▲" or "▼" button, then enter the menu pressing "◀" / "▶" or "**OK**" buttons..



Auto Position

If you shift the picture horizontally or vertically to an unwanted position, use this item to put the picture into correct place automatically.

- Select **Auto position** item by using "▲" or "▼" buttons.
- Press "**OK**" button.
- Press "**MENU**" button or "**BACK**" button to store the value.

Warning: Auto position adjustment recommended to be done with the full screen image for the proper adjustment.

Horizontal Position

This item shifts the image horizontally to right hand side or left hand side of the screen.

- Select **Hori. Position** item by using "▲" or "▼" button.
- Use "◀" or "▶" button to adjust the value.
- Press "**MENU**" button or "**BACK**" button to store the value.

Vertical Position

This item shifts the image vertically towards the top or bottom of the screen.

- Select **Ver. Position** item by using "▲" or "▼" button.
- Use "◀" or "▶" button to adjust the value.
- Press "**MENU**" button or "**BACK**" button to store the value.

Dot Clock

Dot Clock adjustments correct interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.

- Use "◀" or "▶" button to adjust the value.

Clock Phase

Depending on the resolution and scan frequency that you input to the TV Set, you may see a muddy or noisy picture on the screen. In such a case you can use this item to get a clear picture by trial and error method.

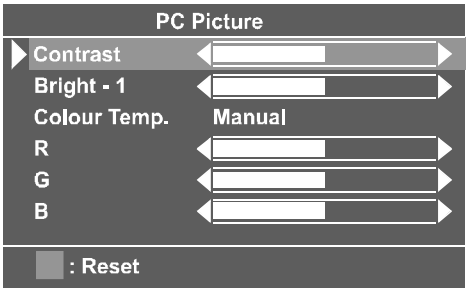
- Use "◀" or "▶" button to adjust the value.

PC Picture Menu

In the Main menu, select "**PC Picture**" using "▲" or "▼" button, then enter the PC Picture menu pressing "◀" / "▶" or "**OK**" buttons.

Contrast, **Bright-1** and **Colour Temp**. adjustments in this menu are identical to adjustments defined in TV picture menu.

R, G, and B adjust the TV image colour in PC mode. You can change the TV colour to your desired colour: R (Red), G (Green), B (Blue)



Sound Menu

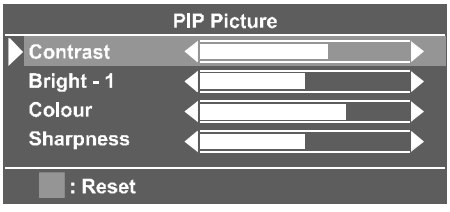
In the main menu select "**Sound**" using "▲" or "▼" button then enter the Sound menu pressing "◀" / "▶" or "**OK**" buttons.

The items in this menu are described at **Sound menu** starting page 16.

PIP Picture

In the Main menu, select "**PIP Picture**" using "▲" or "▼" button, then enter the PIP Picture menu pressing "◀" / "▶" or "**OK**" buttons.

This menu is displayed when PIP is displayed on the screen and otherwise "**PIP No Signal**" message will be displayed at the bottom of menu.



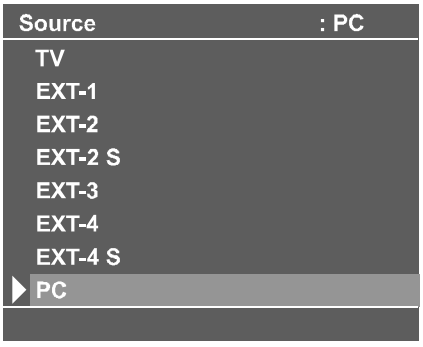
PIP picture is displayed on the screen with "" button. By pressing "**OK**" button, PIP window is selected. PIP position is changed by "" button. There are four different PIP positions. PIP size is changed by "" button. Two different PIP size are available.

Programme in the PIP window is increased / decreased by "P∨ / P∧" , digit buttons or AV button. All EXT modes (Except EXT-3) are also available in PIP window. PIP window is removed from the screen by "" button.

The items in this menu are described at **Picture menu** starting page 14.

Source Menu

In the Main menu, select "**Source**" using "▲" or "▼" button, then enter the Source menu pressing "◀" / "▶" or "**OK**" buttons.



Select the available sources of **TV, EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S** or **PC** using "▲" or "▼" button and by pressing "◀" / "▶" or "**OK**" buttons.

Sound in PC mode

- Connect the PC's Audio output to the TV's **PC Audio In** socket with an audio cable.
- On your remote control,using "♪" button to select sound source from **TV, EXT-1, EXT-2, EXT-3, EXT-4** and **PC** options.
- When PIP is displayed on the screen, "♪" allows you to switch sound between PC and selected PIP source.

Teletext

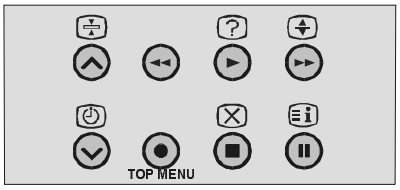
Teletext is an information system that displays text on your TV screen. Using the Teletext information system you can view a page of information on a subject that is available in the list of contents (index).

On screen display is not available in text mode.

Contrast, brightness or colour control is not available, but volume control is available in text mode.

To operate Teletext

- Select a TV station on which Teletext is being transmitted.
- Press (TELETEXT) "" button. Usually the list of contents (index) is displayed on the screen.



To select a page of Teletext

- Press the appropriate digit buttons for the required Teletext page number.

The selected page number is displayed at the top left corner of the screen. The Teletext page counter searches until the selected page number is located, so that the desired page is displayed on the screen.

- Press "P∧" button to move the Teletext screen forward one page at a time.
- Press "P∨" button to move the Teletext screen backward one page at a time.

To Select Index Page

- To select the page number of the index (generally page 100), press "" button.

Searching for a teletext page while watching TV

- In the Teletext mode pressing "" button will switch the screen to the TV mode. In the TV mode enter a page number using digit buttons. As you enter last digit of page number, "" sign will replace the page number and flash until the entered page number is found. Then the page number will replace "" sign again. Now you can display this teletext page pressing "" button.

To Select Double Height Text

- Press "" button for the top half of the information page to be displayed in double height text.
- Press "" button again for the bottom half of the information page to be displayed in double height text.
- Press "" button once more for the full page of normal height text.

To Reveal "concealed" Information

- Pressing "" button once will reveal answers on a quiz or games page.
- Pressing "" button again will conceal the revealed answers.

To Stop Automatic Page Change

The teletext page you have selected may contain more information than what is on the screen; the rest of the information will be displayed after a period of time.

- Press "" button to stop the automatic page change.
- Press "" button again to allow the next page to be displayed.

To Select a Subcode Page

Subcode pages are subsections of long Teletext pages that can only be displayed on the screen one section at a time.

- Select the required Teletext page.
- Press "" button.
- Select the required subcode page number by pressing four digit buttons (e.g. 0001).
- If the selected subcode page is not displayed in a short time, press "" button. TV programme will be displayed on the screen.
- Teletext page number will be displayed on the upper left corner of the screen when the selected page is found.

• Press "⊗" button to display the selected Teletext page.

To exit Teletext

• Press "☰" button. The screen will switch to TV mode.

Fastext and Toptext

Your TV supports the 7 page Teletext system. When the page number of any of the 7 pages in memory is entered, the system will not search for the requested page; instead it will display the page automatically.

• Press "P∧" button to move the Teletext screen forward one page at a time.

• Press "P∨" button to move the Teletext screen backward one page at a time.

For Fastext and Toptext

The subject-heading for the information may have a particular colour.

• Press an appropriate **RED**, **GREEN**, **YELLOW** or **BLUE** button in order to reach the relevant page quickly.

For TOPTEXT

If Toptext transmission is present, colour coded buttons will appear in status row.

If Toptext transmission is not present, status row will not appear.

In Toptext mode the "P∧" or "P∨" commands will request the next or previous page respectively. If Toptext transmission is not available, in case of operation of these commands, wraparound occurs. For example page 100 appears to be one greater than page 199.

Peripheral Equipment Connections

There is a wide range of audio and video equipment that can be connected to your TV.

Connection diagrams at the and of this section show you where the different equipment should be connected at the back side of the TV.

Via the Euroconnector

Your TV set has 2 Euroconnector sockets. If you want to connect peripherals (e.g. video, decoder, etc.) which have Euroconnectors, to your TV, use **SCART** input.

If an external device is connected via Euroconnector sockets TV is switched to AV mode automatically. In this case if both sockets are connected SCART has the precedence.

T-V Link compatible VCR

Be sure to connect the T-V Link compatible VCR to the **EXT.2** terminal. If not, the T-V Link function will not work properly.

• When connecting a T-V Link compatible VCR to the EXT.2 terminal, be sure to connect the decoder to the VCR. If not, the **T-V Link** function may not work properly. And then set the **Decoder(EXT-2)** function for the channel to **ON** to unscramble a scrambled channel.

RGB mode

If an equipment can output the **RGB** signals, connect it to the **EXT-1** or **EXT-2** terminal.

EXT-2 S Mode

If the equipment connected to your TV set supports S-Video (Y/C) output from Euroconnector, you can have a better picture quality by selecting **EXT-2 S** mode and connecting your equipment to the **EXT.2 (EXT-2 S)** terminal of TV. See your equipment's booklet to check if your equipment has such feature.

Via the RCA jacks

If you have an equipment (such as a Camcorder) which has the RCA jacks, connect it to the **EXT-4** terminal with the video and audio cables.

If you have a device which outputs component

signal, connect it to the EXT-3 terminal with a component video cable.

Via the ANT (aerial) socket

If your equipment does not have an Euroconnector or RCA jacks, connect it to the TV with an aerial cable. For details, see the manual provided with the equipment.

- To store the test signal that comes from the equipment, see "**Install Menu**" on page 18 and store it to the program number 0. You can watch images from that equipment to select the program number which you stored the test signal.

Decoder

Cable TV offers you a wide choice of programmes. Most of them are free, others are to be paid for by the viewer. This means that you will need to subscribe to the broadcasting organisation whose programmes you wish to receive. This organisation will supply you a corresponding decoder unit to allow the programmes to be unscrambled.

For further information ask your dealer. See also the booklet supplied with your decoder.

Connect a decoder with an aerial socket to the TV

- Connect the aerial cable.

Connect a decoder without an aerial socket to the TV

- Connect the decoder to your TV with a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack). When your decoder has a Euroconnector / RCA Jack you can obtain better picture quality if you connect a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack).

TV and Video Recoder (VCR)

- Connect the Video Recorder to the ANT (antenna input) socket of the TV with the aerial cable.
- Connect the Video Recorder to the **EXT-1** or **EXT-2** terminal with the SCART cable, or connect it to the **EXT-4** terminal with the audio and video cables.

NTSC Playback

Connect a NTSC video recorder to a terminal. Then press "**AV**" button to select the corresponding AV mode.

INTSC 3.58/4.43 system is detected automatically in AV mode.

Camera and Camcorder

To connect to the EXT-4 terminal

Connect your camera or camcorder at the back side of your TV.

- Connect your equipment to the TV via **VIDEO** (yellow), **AUDIO R** (red) and **AUDIO L** (white) inputs. You should connect the jacks to the input in the same colour.

Connect the decoder to the video recorder

Some video recorders have a special euroconnector for decoder.

- Connect a eurocable to the euroconnector of your decoder and to the special euroconnector of your video recorder. See also the handbook of your video recorder.
- To connect your video recorder to the TV, see TV and Video Recorder section.

If you want to connect more equipment to your TV, consult your dealer.

Connecting Headphones

Use the stereo headphone socket on the right side of your TV, to connect headphones.

Connecting the PC

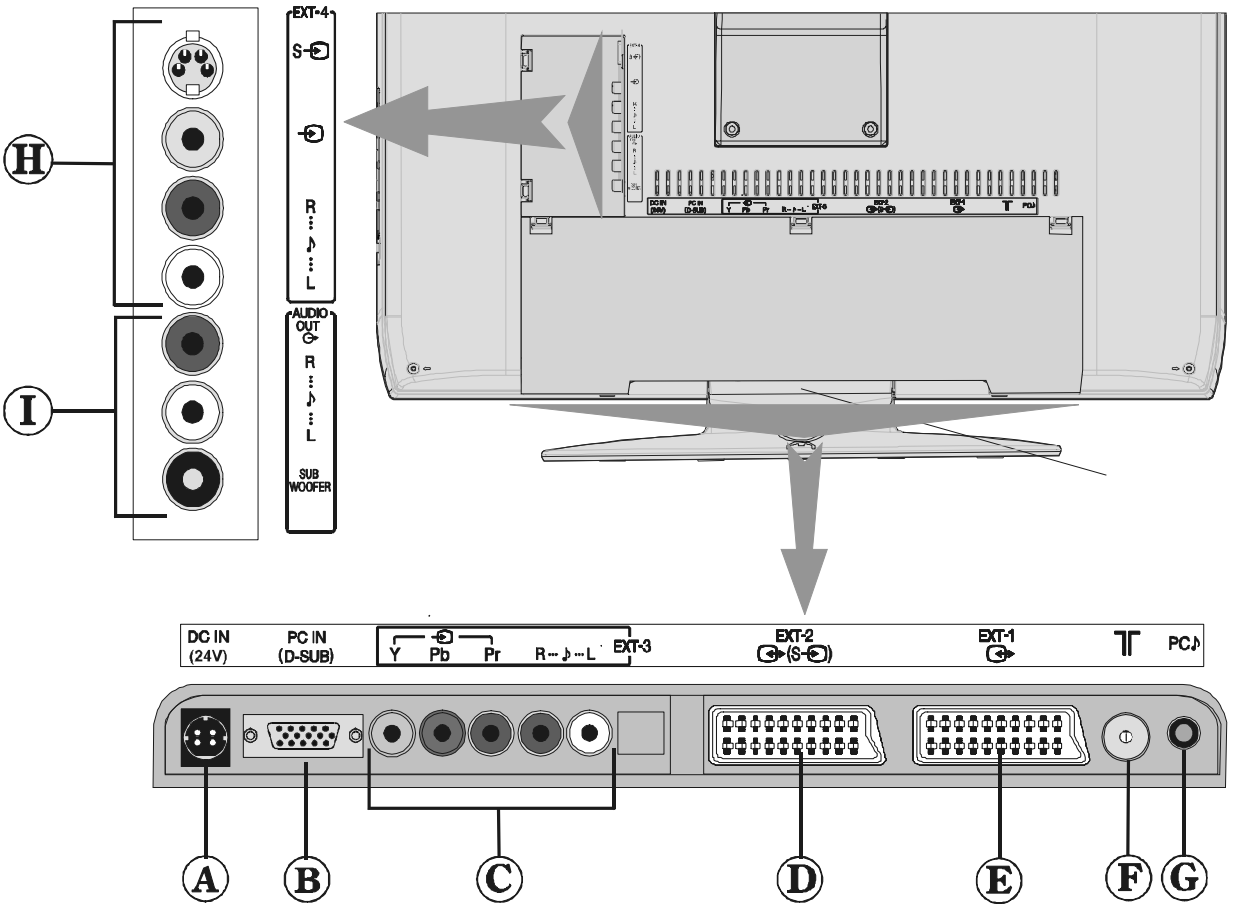
Connect PC monitor with 15-pin PC cable to the 15-pin connector on the rear of the computer. For detail installation procedure see **Installation** in PC mode.

To connect to S-Video input

Connect your camera or camcorder at the back side of your TV.

- Connect your equipment to the TV via S-Video input at the back side by using S-Video cables.

Peripheral Equipment Connections



Ⓐ DC 24 V

Ⓑ PC INPUT

Ⓒ EXT-3
- Y
- Pb
- Pr
- Component Audio In R
- Component Audio In L

Ⓓ EXT-2

Ⓔ EXT-1

Ⓕ ANTENNA

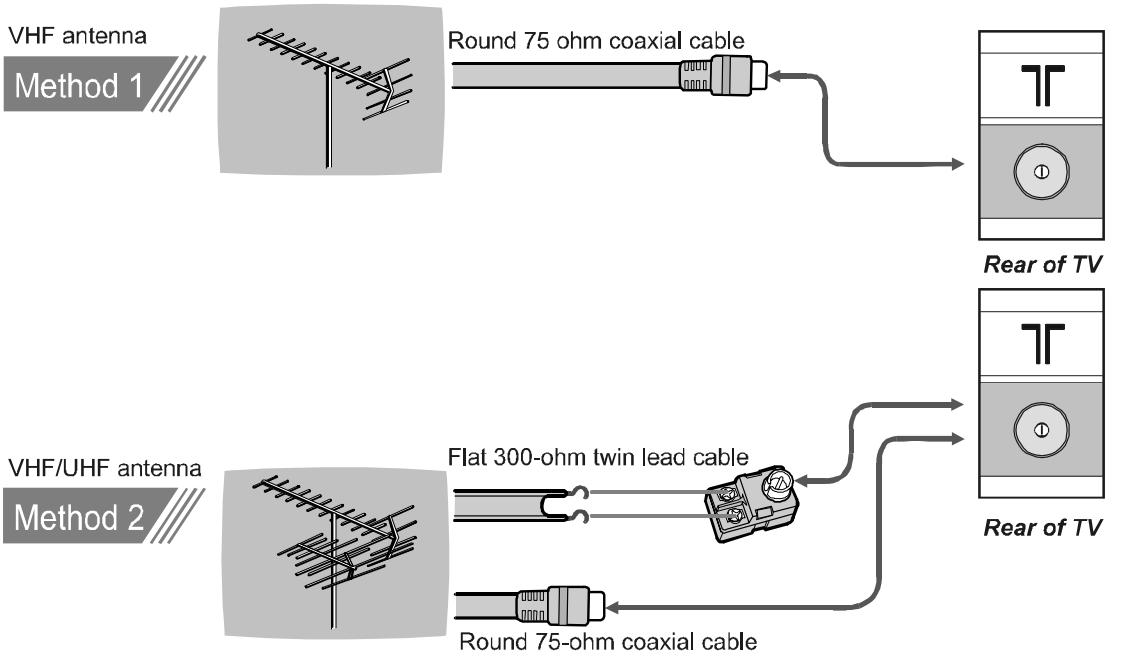
Ⓖ PC AUDIO IN

Ⓗ EXT-4
- S-Video In
- Video In
- Audio R
- Audio L

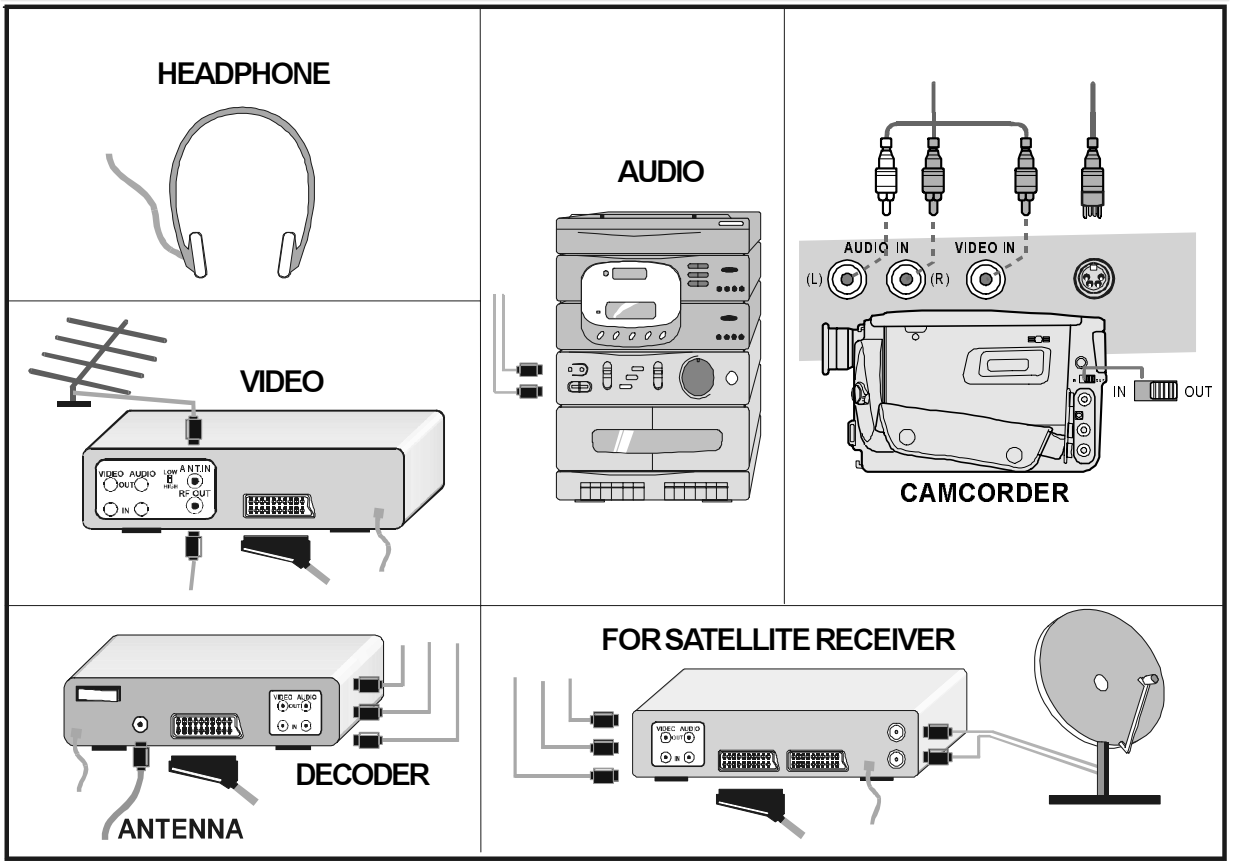
Ⓘ AUDIO OUT TERMINAL
- Audio R
- Audio L
- Subwoofer Out

Antenna Connections

Outdoor Antenna Connections



Peripheral Equipment Connections



PC Input Typical Display Modes

The display has a maximum resolution of 1360 x 768, vertical sync. frequency range of 50-75 Hz and a horizontal sync. frequency range of 30-69 KHz.

The following table is an illustration of some of the typical video display modes.

Mode	Resolution		Frequency		Sync. Polarity	
	Horizontal	Vertical	Hor. (kHz)	Ver. (Hz)	Hor.	Ver.
1	640	400	31.5	60	-	+
2	640	400	31.5	70	-	-
3	640	480	31.5	60	-	-
4	640	480	37.9	72	-	-
5	640	480	37.5	75	-	-
6	720	400	31.5	70	-	+
7	800	600	35.2	56	+	+
8	800	600	37.9	60	+	+
9	800	600	48.1	72	+	+
10	800	600	46.9	75	+	+
11	1024	768	48.4	60	-	-
12	1024	768	56.5	70	-	-
13	1024	768	60.0	75	+	+
14	1280	720	44.6	60	-	+
15	1360	768	47.7	60	+	+

The native resolution of the TFT-LCD Panel is 1360 x 768. Therefore using Mode 15 is advised to get the best PC input display quality.

Tips

Care of the Screen

Clean the screen with a slightly damp, soft cloth. Do not use abrasive solvents as they may damage the TV screen coating layer

Colors of image on screen are abnormal

Have you selected the correct TV system? Is your TV set or house aerial located too close to the loudspeakers, non-earthed audio equipment or neon lights, etc. ?

Mountains or high buildings can cause double pictures or ghost images. Sometimes you can improve the picture quality by changing the direction of the aerial.

Is the picture or Teletext unrecognisable? Check if you have entered the correct frequency.

The picture quality may degrade when two peripherals are connected to the TV at the same time. In such a case, disconnect one of the peripherals.

No Image on Display Screen

Is the aerial connected properly? Are the plugs connected tightly to the aerial socket? Is the aerial cable damaged? Are suitable plugs used to connect the aerial? If you are in doubt, consult your dealer.

No Image means that your TV is not receiving any transmission. Have you pressed the correct buttons on the remote control? Try once more.

PC Picture

If no PC picture appears, check that the D-SUB cable is connected properly. Check that your PC's resolution set correctly. See page 30 for supported modes.

Sound

You can not hear any sound. Did you perhaps interrupt the sound, pressing "🔇" button? Are external speakers connected to the TV?

Sound is coming from only one of the speakers. Is the balance set to one direction extreme? See **Sound** menu.

Remote Control

If your TV no longer responds to the remote control, perhaps the batteries are exhausted. Replace the batteries.

Have you selected the wrong menu? Press "**MENU**" button to return to normal screen or press "**BACK**" button to return to the previous menu.

No solution

Switch your TV set off and on. If this does not work, switch off, remove the mains plug and call the service personnel; never attempt to repair it yourself.

For users in the UK:

If you have any problems setting up your new TV, please call the JVC Helpline on 0870330 5000

For users in the Republic of Ireland:

If you have any problems setting up your new TV, please call the JVC Helpline on 1890 - 582500

Specifications

Item \ Model	LT-23C50BJ
Broadcasting Systems	PAL SECAM BG, DK, I, L, Lp
Channels and Frequencies	VHF (VL) 46,25 MHz - 168,25 MHz VHF (VH) 175,25 MHz - 463,25 MHz UHF 471,25 MHz - 863,25 MHz Cable TV (S1-S20/ S21-S41)
Input Signal	**Video:** Analog 0,7 Vp-p 75 ohm positive **Sync:** TTL Level positive or negative, Seperate sync.
Horizontal Timing	30 - 69 KHz
Vertical Timing	50 - 75 Khz
Dot Rate	78,75 MHz max.
Panel Size	23,01" (583,1 mm) (measured diagonally)
Visible Picture Size	508,5 mm horizontal x 286,1 mm vertical
Display Resolution	1360 x 768 max. (WXGA)
Number of Preset Channels	100
Channel Indicator	On Screen Display (OSD)
RF Aerial Output	75 Ohm (unbalanced)
Power Requirements	**Adaptor:** 100-240 V AC, 50 Hz / **TV:** 24 V DC
Power Consumption (W)	108 W (max) / STAND-BY <3W
Sound Systems	German , Nicam Stereo
Audio Output	2 x 5 $W_{RMS.}$ (%10 THD)
EXT-1 Terminal	Euroconnector (21-pin, SCART 1) (bottom of the cabinet) • Video Input, Audio L/R Inputs and RGB inputs are available. • TV broadcast outputs (Video and Audio L/R) are available.
EXT-2 Terminal	Euroconnector (21-pin, SCART 2) (bottom of the cabinet) • Video Input, S-VIDEO (Y/C) input, Audio L/R and RGB inputs are available. • Video and Audio L/R outputs are available. • T-V Link functions are available.
EXT-3 Terminal	RCA connectors x 5 (bottom of the cabinet) • Component video (Pr, Pb, Y) inputs and Audio L-R inputs are available
EXT-4 Terminal	RCA connectors x 3 (side of the cabinet) S-VIDEO connector x 1 (side of the cabinet) • Video input, S-VIDEO (Y/C) input and Audio L/R inputs are available.
AUDIO OUT Terminal	RCA connectors x 3 • Audio L/R output are available. • Subwoofer out is available.
PC IN terminal	Analog RGB D-SUB 15 x 1 • PC signal is available (refer to page 28 for details of the signals which can be input)
PC AUDIO IN terminal	Stereo mini-jack (3.5 mm diameter)
Dimensions (W x H x D)	614 mm x 482 mm x 240 mm 614 mm x 438 mm x 79 mm (TV only)
Weight	7,4 kg (with stand) / 6,4 kg (TV only)
Accessories	Remote control unit x 1 (RM-C1860) - AA/R6 dry cell battery x 2 AC adapter x 1 Power cord x 1
Headphone jack	Stereo mini-jack (3.5 mm diameter)

JVC

ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO

InteriArt

LT-23C50BU
LT-23C50SU

WIDE LCD PANEL TV — INSTRUCTIONS

BREITBILD-LCD-TV — BEDIENUNGSANLEITUNG
TÉLÉVISEUR À GRAND ÉCRAN LCD — MANUEL D'INSTRUCTIONS
TV A PIENO SCHERMO LCD — ISTRUZIONI

JVC

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For your safety

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured. So, please read the points below for your own safety. They are of a general nature, intended to help you with all your electronic consumer products and some points may not apply to the goods you have just purchased.

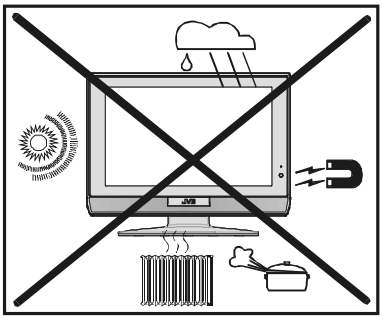
Some “DOs” and “DON’Ts” for you

Air Circulation…

Leave at least 10cm clearance around the television to allow adequate ventilation. This will prevent the TV from overheating and consequential possible damage to the TV. Dusty places should also be avoided.

Heat Damage…

Damage may occur if you leave the TV in direct sunlight or near a heater. Avoid places subject to extremely high temperatures or humidity, or locations where the temperature is likely to fall below 5ºC (41ºF).



Mains Supply…

The mains supply required for this equipment is **100-240 V AC, 50 Hz.** Never connect to a DC supply or any other power source. DO ensure that the TV is not standing on the mains lead. DO NOT cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance.

Hot / Moderate Climate Conditions

This device is suitable for working in hot and moderate climate conditions.

IF IN DOUBT PLEASE CONSULT A COMPETENT ELECTRICIAN.

DO…

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and inter-connections between pieces of equipment) are properly made and in accordance with the manufacturers' instructions.

Switch off and withdraw the mains plug before making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

DO NOT…

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T obstruct the ventilation openings of the equipment with items such as newspapers, table-cloths,

curtains etc. Overheating will cause damage and shorten the life of the equipment.

DON'T allow electrical equipment to be exposed to dripping or splashing or objects filled with liquids, such as vases, to be placed on the equipment.

DON'T place hot objects or naked flame sources, such as lighted candles or nightlights on, or close to the equipment. High temperatures can melt plastic and lead to fires.

DON'T use makeshift stands and NEVER fix legs with wood screws. To ensure complete safety, always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T listen to headphones at high volume, as such use can permanently damage your hearing.

DON'T leave equipment switched on when it is unattended, unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch the equipment off and make sure your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or it is damaged in any way – switch off, withdraw the mains plug and consult your dealer.

DON'T put the empty batteries into garbage instead of recycle bin to reduce harmfull effects to the environment.

ABOVE ALL – NEVER let anyone, especially children, push anything into holes, slots or any other openings in the case – this could result in a fatal electric shock.

NEVER guess or take chances with electrical equipment of any kind – it is better to be safe than sorry.

To fully disconnect the TV, switch off the mains socket and remove the Power plug.

Safety Precautions for Power adapter

- Be careful! May become hot.
- For indoor and dry location use only.
- Risk of electric shock.
- Shock hazard, do not open.
- Keep all power adapters away from any other heat source.
- Always use power adapter(s) well-ventilated area.

** *Cold cathode fluoresant lamp in LCD PANEL contains a small amount of mercury, please follow local ordinates or regulations for disposal.*

"The LCD panel is very high technology product with about a million thin film transistors, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product." Please note that certain light guns used with games consoles may not work on this product.

Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



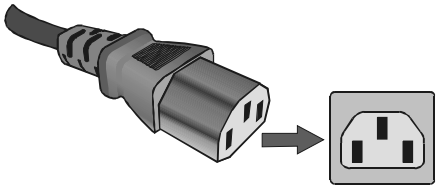


WARNING

- *Fingers may be trapped under the TV causing injuries. Hold the TV at the bottom in the middle, and do not allow it to tilt up or down.*
- *The TV may fall causing injuries. Hold the bottom of the stand with your hand and tilt the TV up and down.*
- *Do not allow children to hang from the TV, place their elbows on the TV or lean against the TV. Doing so may cause the TV to fall over and lead to injuries.*

CAUTION:

- *To avoid electric shock or damage to the unit, first firmly insert the small end of the power cord into the AC Adapter unit it is no longer wobbly, and then plug the larger end of power cord into an AC outlet.*



Important Information

Please take note

EXCLUSION CLAUSE

JVC shall under no circumstances be liable for loss and/or damage to the product caused by:

- fire;
- earthquake;
- accidental damage;
- intentional misuse of the product;
- use of the product in improper conditions;
- loss and/or damage caused to the product whilst in the possession of a third party;
- any damage or loss caused as a result of the owner' s failure and/or neglect to follow the instructions set out in the owner's manual;
- any loss or damage caused directly as a result of misuse or malfunction of the product when used simultaneously with associated equipment;

Furthermore, under no circumstances shall JVC be liable for any consequential loss and/or damage including but not limited to the following, loss of profit, interruption of business, the loss of recorded data whether caused during normal operation or misuse of the product.

WARNING! NEVER LEAVE A STATIONARY IMAGE ON THE SCREEN

If stationary images generated by TELETEXT, CHANNEL IDENTIFICATION LOGOS, COMPUTER DISPLAYS, VIDEO GAMES, ON SCREEN MENUS, etc. are left on the TV screen for any length of time, they could become permanently ingrained.

If you use your television to display completely still images, or moving pictures which have a permanent still image superimposed e.g. broadcast network logos, it is always advisable to reduce BOTH the brightness and contrast settings.

Care and disposal

Cleaning the screen and cabinet...

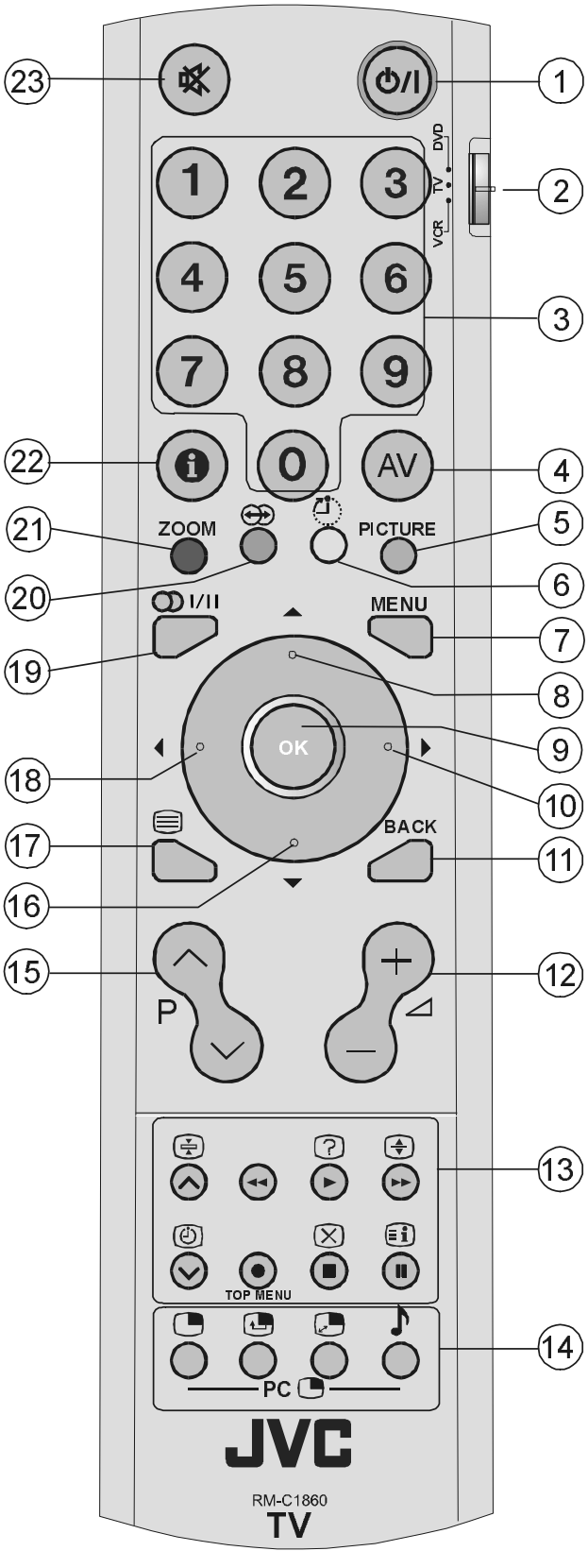
Turn off the power, clean the screen and cabinet with a soft, dry cloth. We recommend that you do not use any proprietary polishes or solvents on the screen or cabinet as this may cause damage.

Disposal...

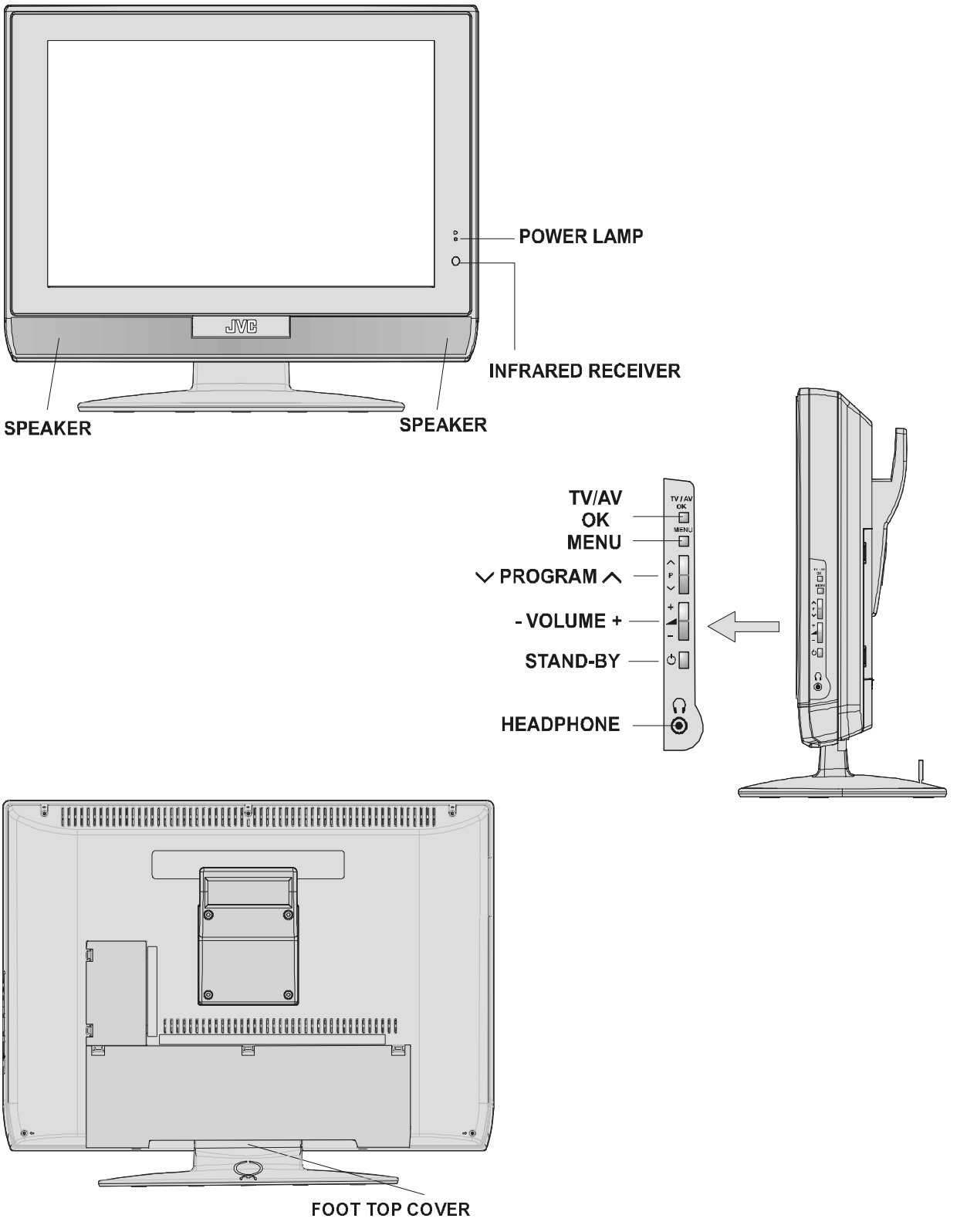
When the set reaches the end of its useful life please dispose of it in accordance with Local Government Regulations or at a recycling centre.

Remote Control Buttons

① ⏻ / I = (Stand By) button
② TV / VCR / DVD Switch
③ Number buttons
④ **AV** button (TV, EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S or PC)
⑤ **BLUE / PICTURE** Mode button
⑥ **YELLOW** / Sleep Timer button
⑦ **MENU** button
⑧ ▲ = Cursor Up button
⑨ OK button
⑩ ▶ = Cursor Right button
⑪ **BACK** button
⑫ = Volume + / - buttons
⑬ Teletext / VCR /DVD Control buttons
⑭ PC Control Buttons
⑮ P∧/∨ buttons
⑯ ▼ = Cursor Down button
⑰ = Teletext Button
⑱ ◀= Cursor Left button
⑲ I/II = Stereo / Bilingual button
⑳ **GREEN** / Hyper Sound On/Off button
㉑ **RED / ZOOM** Mode button
㉒ = Information Button / T-V Link in Program Menu
㉓ = Mute button



Control Panel Buttons



With certain combinations of connectors and leads the back cover may not be easily fitted. If the cover is left off, this in no way infringes safety requirements.

Using the stand

This TV comes with a Table Top Stand already attached.

This stand can be used to adjust the direction of the TV screen 5° up, 10° down, and 20° to the left or right.

Tilt the TV up and down:

While holding the bottom of the stand with one hand, use your other hand to hold the middle of the top of the TV and slowly tilt the TV up and down.

- As a safety measure, the stand is constructed so that it requires a certain amount of force to tilt the TV.



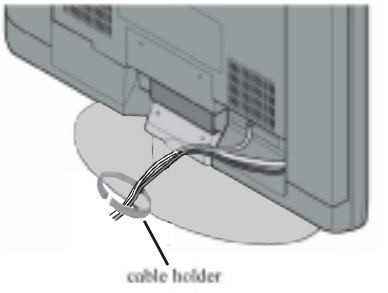
Rotate the TV to the left and right:

While holding the bottom of the stand with one hand, use your other hand to hold the odge of the panel and slowly adjust the direction of the TV screen.



Cable holder

A cable holder which is used to keep the connection cables tidy is attached to the back of the stand.



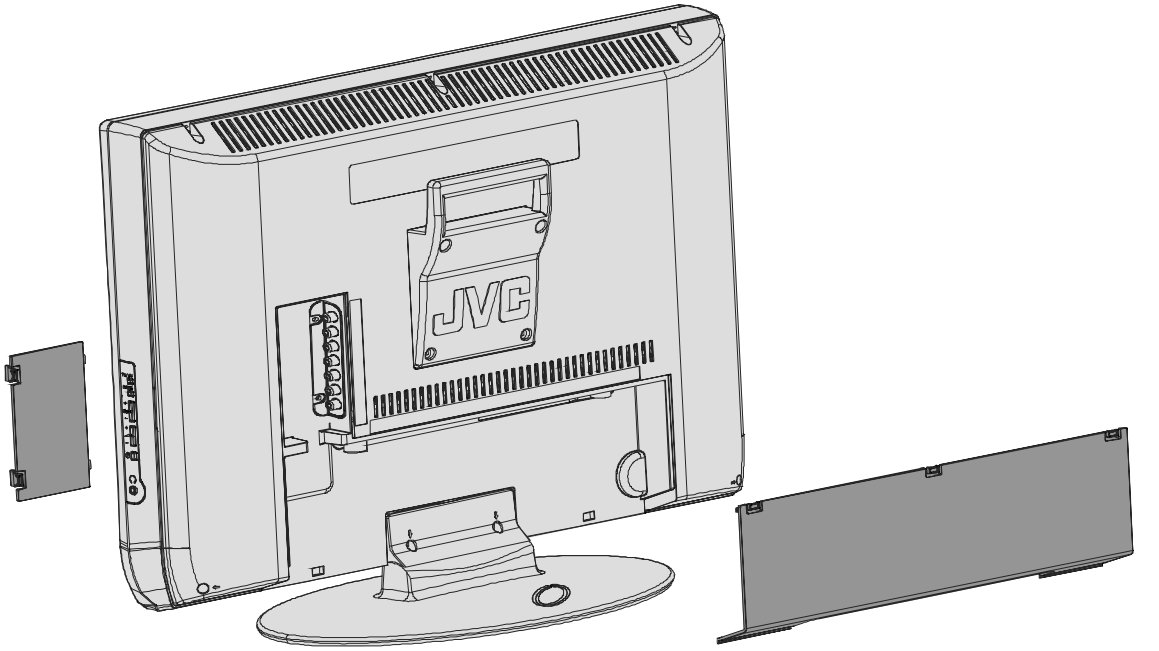
Remove the terminal Cover

There are connection terminals behind the covers of the rear of the TV. Remove the cover before connecting an antenna, DVD or VCR.

Remove the covers by removing the hooks. When replacing the covers, place the side or bottom of the covers against the TV and insert the hooks.

• Leave the covers off if they do not fit properly. DO NOT force to replace the covers. Doing so may cause damages of the connection cables and the covers.

• Leave these covers off when mounting the TV on a wall.



• 100 mm mount based on VESA regulation is equipped.

• The handle and the stand can be left by loosing the screws with a screwdriver when mounting the TV on a wall.

• Spread a soft cloth on a flat table and then place the TV on the cloth with the screen facing downwards when you leave the handle and the stand.

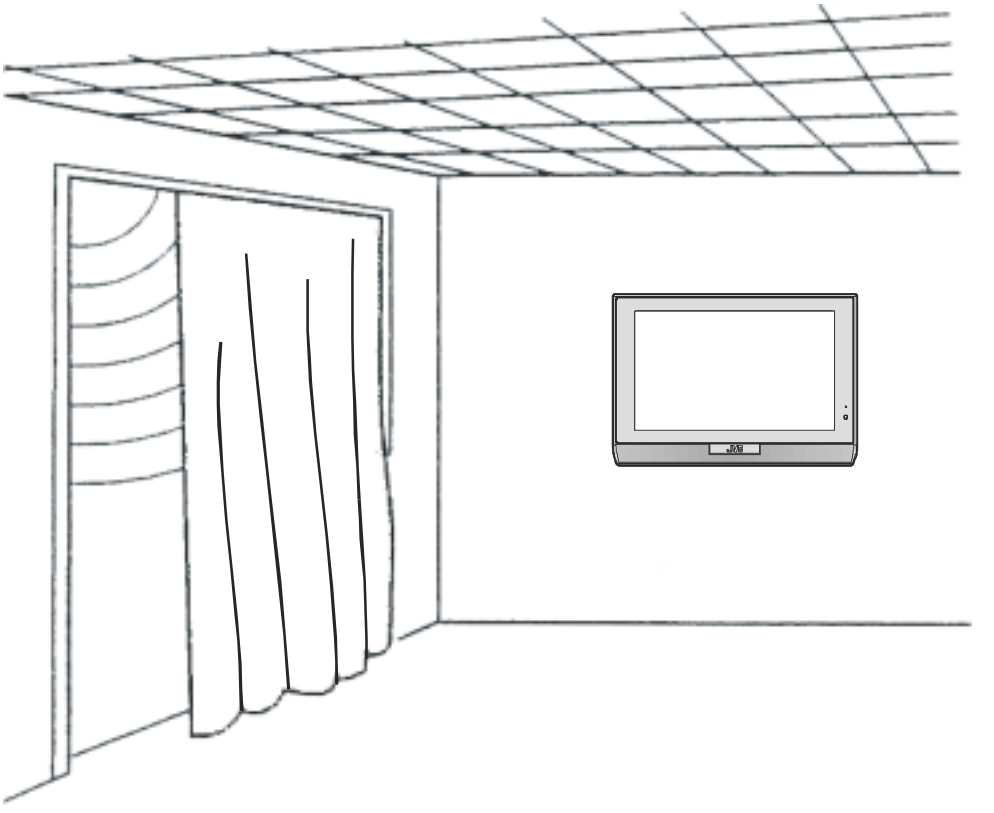
Where to install

Locate the TV away from direct sunlight and strong lights, soft, indirect lighting is recommended for comfortable viewing. Place on a sturdy platform, the mounting surface should be flat and steady, it should then be secured to the wall with a sturdy tie using the hook on the back of the TV, this will prevent it from falling over. Use curtains or blinds to prevent direct sunlight falling on the screen.

A floor and table top stand are available for this television, or and angled bracket which enables the TV to be wall-mounted.

The LCD display panels are manufactured using an extremely high level of precision technology, however sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

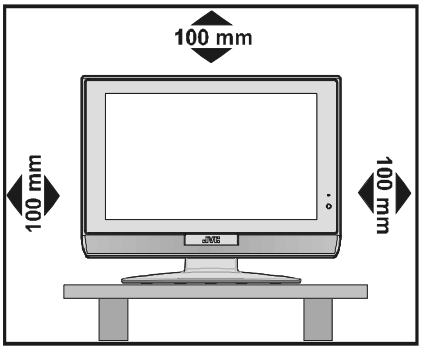
Make sure the TV is located in a position where it cannot be pushed or hit by objects, as pressure will break or damage the screen.



Preparation

Install Display on solid horizontal surface such as a table or desk.

For ventilation, leave a space of at least 10 cm free all around the set. To prevent any fault and unsafe situations, please do not place any objects on top of the set.



Features

- It is a remote controlled colour television and PC monitor.
- 100 programmes from VHF, UHF bands or cable channels can be preset.
- It can tune cable channels.
- Controlling the TV is very easy by its menu driven system.
- It has 2 pieces of Euroconnector socket for external devices (such as video, video games, audio set, etc.)
- To use as a PC monitor, 15 Pin Mini D-Sub connector for computer.
- Optional stereo sound systems (German or German+Nicam) are available.
- Multilanguage OSD.
- Teletext (Fastext, 7 pages).
- It is possible to connect headphone.
- A.P.S. (Automatic programming system)
- All programmes can be named.
- Forward or backward automatic tuning.
- Sleep timer.
- Child lock
- Auto, Full, Regular, Panoramic, 14:9 Zoom, 16:9 Zoom,16:9 Zoom Subtitle modes.
- Automatic sound mute when no transmission.
- When no valid signal is detected, after 5 minutes the TV switches itself automatically to stand-by mode.
- NTSC Playback.
- Universal power supply range is a standard feature on this model.
- TV Picture in PC (if PC input available).
- PLL (Channel Search)
- PC input (Support Up to 1360x 768)

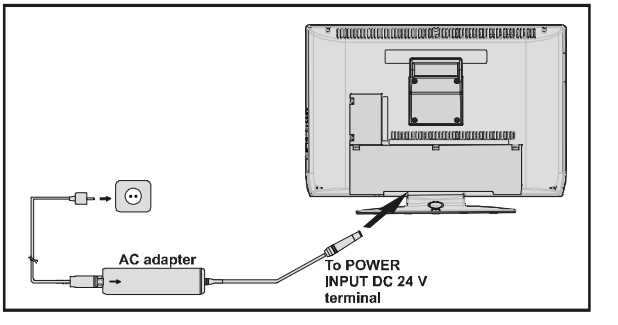
Panel Features

- High resolution, 23”-inch TFT LCD display.
- High contrast ratio (800:1 Typical)
- Brightness: 500 cd/$m^{2.}$
- High-speed response time < 25 msec.
- Wide viewing angle (typical) 170° (horizontal) and 170° (vertical).
- 8-bit colour depth, display 16.7 M colours.

Before Switching on your TV

Power connection

Only use the adaptor supplied with this product.



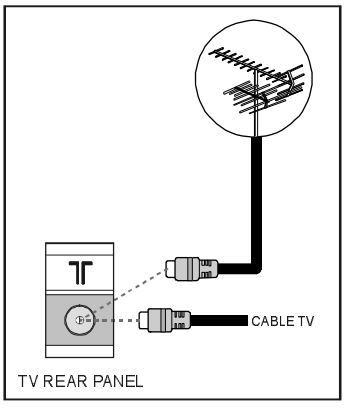
IMPORTANT: The TV set is designed to operate on **24 V DC. For this, an adaptor is used which gives 24 V DC voltage. Connect this adaptor to a system that supplies 100 -240V AC, 50 Hz.**

- After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

Connections to the RF input socket

- Connect the aerial or cable TV plug to the RF input socket located at the back of the TV and connect the cable plug coming out from

the TV out socket located at the devices (VCR, DVB etc.) to this socket as well.



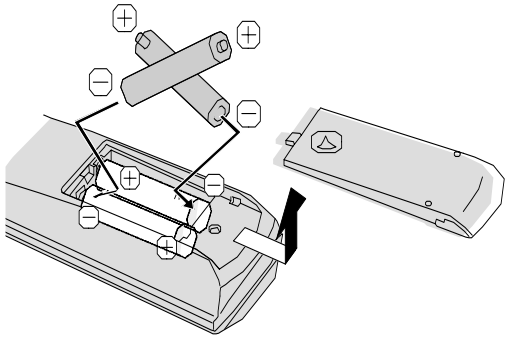
How to connect other devices

IMPORTANT: Switch off the TV before connecting any external device.

Sockets for external connections are at the back of the TV. For connection of other devices via Euroconnector refer to the manuals of the related devices.

Inserting batteries in the remote control handset

- Remove the battery cover located on the back of the handset by gently pulling upwards from the indicated part.
- Insert two AA/R6 dry cell or equivalent type of batteries inside.
- Replace the battery cover.



NOTE: *Remove the batteries from remote control handset when it is not to be used for a long period.Otherwise it can be damaged due to any leakage of battery.*

Old batteries must be disposed in a designated area. If performance of the remote control reduces, replace the batteries with the correct type. Do not combine a used, old battery or a new one or mixed battery types. Remove dead batteries immediately to prevent acid from leaking into the battery compartment.

Switching the TV ON/OFF

To switch the TV on

Your TV will switch on in two steps:

1- Connect the power supply cord to the system. Then the TV switches itself to stand-by mode and the power lamp becomes red located on the front of the TV.

2- To switch on the TV from stand-by mode either:

Press the "⏻ / **I**" button on the remote control or on the right side of the TV

or.

press a digit button on the remote control so that a programme number is selected,

or,

Press **"P/Ch"** buttons on the right side of the TV or press **"P∨"** or **"P∧"** buttons on the remote control, so that last switched off programme is selected.

By either ways the TV will switch on and the power lamp will become green.

To switch the TV off

- Press the "⏻ / **I**" button on the remote control or on the right side of the TV, so the TV will switch to stand-by mode and the power lamp will become red.

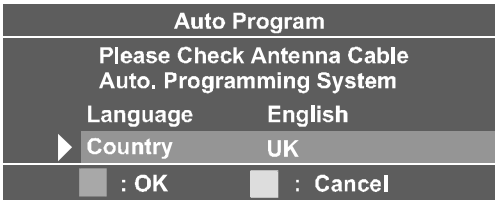
NOTE: To switch the TV off completely remove the mains plug from the socket.

Operating the TV

You can operate your TV both using the remote control handset and onset buttons.

First A.P.S. (Automatic Programming System)

APS, searches and sorts all channels and stores them automatically on your TV, according to the transmission of programme systems in your area.



To cancel APS before starting, press BLUE button.

First of all choose the "**Language**" which the menus of the TV will appear. As soon as you change the language, the menu items will be displayed in the selected language. . By pressing the " ▲" or " ▼" button, come to the "**Country**" item and select the country. This will effect the sort process in APS. Press red button to start A.P.S.

After APS is finalized, a programme list will appear on the screen. In the programme list you will see the programme numbers and names assigned to the programmes.

If you press the BLUE button at any time while the A.P.S. is running, the A.P.S. will be ended.

If you do not accept the locations and / or the programme names of programmes, you can change them in Program menu. For details see **Program Menu** on page 19.

If you do not have a T-V LINK compatible VCR, press BLUE button to exit the menu.

If you have aT-V LINK compatible VCR connected to the EXT-2 terminal, press " ℹ" button to display T-V LINK menu. Then follow the operating procedure "**Downloading data to VCR**" in the following T-V LINK section.

T-V LINK

When a T-V LINK compatible VCR connected to the EXT-2 terminal on the TV, it is easier to set up the VCR and to view videos. T-V LINK uses the following features:

To use T-V LINK functions

A "**T-V LINK compatible VCR**" means a JVC video cassette recorder with the T-V LINK logo, or with one of the following logos. For details see your VCR instruction manual.

"**Q-LINK**" (A trademark of Panasonic Corporation)

"**Data Logic**" (A trademark of Metz Corporation)

"**Easy Link**" (A trademark of Phillips Corporation)

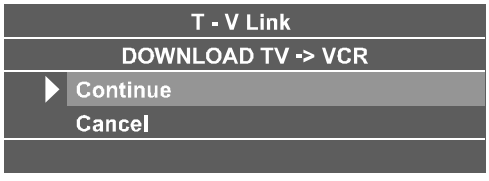
"**Megalogic**" (A trademark of Grundig Corporation)

"**SMARTLINK**" (A trademark of Sony Corporation)

Downloading data to VCR:

The VCR will automatically download the registered data on the TV channels from the TV. This means you do not need to set up the programme channels on your VCR manually.

The "**T-V Link**" menu will be displayed when you press the " ℹ" button while Program menu is displayed.



Press "►" or "**OK**" button to start downloading data to VCR. "**TRANSFER**" is displayed in the menu



If you do not want to continue press the BLUE button to exit the menu.

If "**FEATURE NOT AVAILABLE**" is displayed,

download was not performed correctly. Before trying to download again, check that:

• The VCR power is turned on.

• The VCR is T-V LINK compatible.

• The VCR is connected to the Ext-2.

• The scart cable is fully wired.

Direct REC:

You can easily record to VCR the images that you are watching on the TV. For details, read the manual for your VCR. Use your VCR controls you can not carry out Direct REC using your TV control.

When the VCR is not ready (For example when there is no tape inserted), "**NO RECORDING**" is displayed. In the following situations, the VCR will stop recording if the Tv is turned off, if the TV channel or input is changed, or if the menu is displayed on the TV:

• When recording images from an external device connected to TV (For example camcorder).

• When recording a TV channel after it has been unscrambled on a decoder.

• When recording a TV channel by using the TV's output because the VCR's own tuner can not properly receive that channel.

TV autopower on/VCR image view:

When the VCR starts playing, the TV automatically turns on and images from EXT-2 appear on the screen.

This function does not happen if your TV's main power is turned off. Set your TV's main power to on (StandBy Mode).

Operating the TV

You can operate your TV both using the remote control handset and onset buttons.

Volume setting and programme selection can be made by using the buttons at the control panel on the right side of the TV.

Volume Setting

• Press "◢ **-**" button to decrease volume or "◢ **+**" button to increase volume, so a volume level scale (slider) will be displayed at the middle of the bottom on the screen.

Programme Selection

• Press "**P**∧" button to select the next programme or "**P**∨" button to select the previous programme.

Entering Main Menu

• Press "**MENU**" button to enter Main menu. In the Main menu select submenu using "**P**∨" or "**P**∧" button and enter the submenu using" ◢ **-**" or " ◢ **+**" button. To learn the usage of the menus, refer to the Menu System sections.

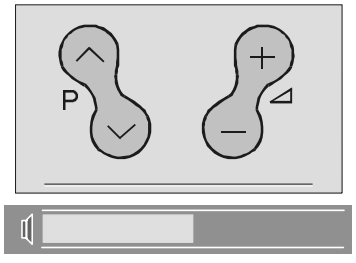
Operating with Remote Control

The remote control handset of your TV is designed to control all the functions of the model you selected. The functions will be described in accordance with the menu system of your TV.

Functions of the menu system are described in following sections.

Volume Setting

Press " ◢ **+**" button to increase volume. Press " ◢ **-**" button to decrease volume. A volume level scale (slider) will be displayed in the middle at the bottom of the screen.



Programme Selection (Previous or next programme)

- Press "**P**∨" button to select the previous programme.
- Press "**P**∧" button to select the next programme.

Programme Selection (direct access):

Press digit buttons on the remote control handset to select programmes between 0 and 9. TV will switch to the selected programme. To select programmes between 10 - 99, press the digit buttons consecutively which programme you want to select (eg. for programme 27, first press 2 and then 7). When it is late to press second digit button only the first digit programme will be displayed. The limit of the delay time is 3 seconds

.Example: PR6 → press 6, PR12 → press 1and 2 , PR123 → press 1,2 and 3.

Press directly the programme number to reselect single digit programmes.

***Hint**: The channel list numbers are assigned by the broadcasters. Because not all channels are broadcast free-to-air and stored by the receiver, the channel list numbers do not run continuously. The fifteenth channel in the list, for example, may not be channel number 15 but channel number 17.*

Menu System

Your TV has been designed with a menu system to provide an easy manipulation of a multifunction system. The TV is controlled by choosing the commands, which are displayed on the screen.

MAIN MENU

Press the "**MENU**" button. The main menu will be displayed in the middle of the screen.



To select a sub-menu use "▲" or "▼" button, and press "◀" or "▶" button or directly press "**OK**" button.

In EXT-1, EXT-2 and EXT-4 modes, main menu appears the same as in TV mode but without Program sub-menu.

In EXT-3 mode, Main Menu appears as follows:



Menu does not disappear automatically if it is left on the screen.

Press "**MENU**" button again to remove menu.

Picture Menu

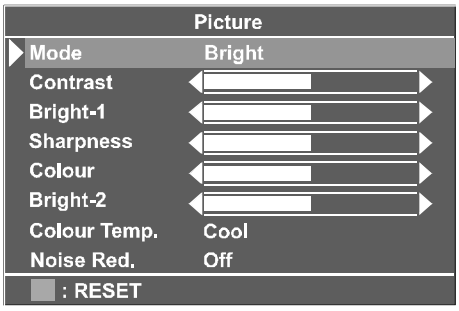
Press "**MENU**" button, now you are in main menu. In the Main menu, select "**Picture**" using "▲" or "▼" button, then enter the Picture menu pressing "◀" / "▶" or "**OK**" button.

Setting Mode

- As you enter the picture menu, Mode will be the first item.

• By pressing "◀" or "▶" button you may choose one of these options:

Soft, Standard and Bright.

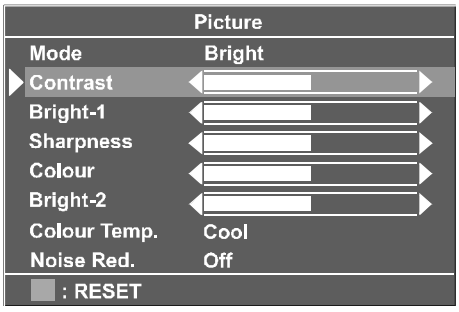


Setting Contrast

• Using "▲" or "▼" button select Contrast.

• Press "▶" button to increase contrast level.

• Press "◀" button to decrease contrast level.

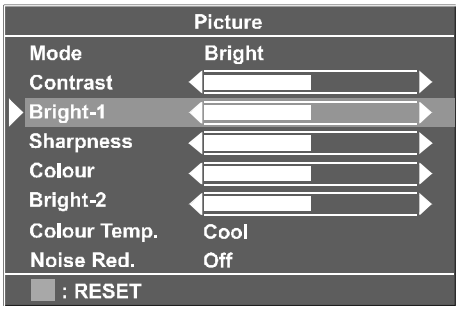


Setting Bright-1

• Using "▲" or "▼" button select Bright-1.

• Press "▶" button to increase brightness.

• Press "◀" button to decrease brightness.

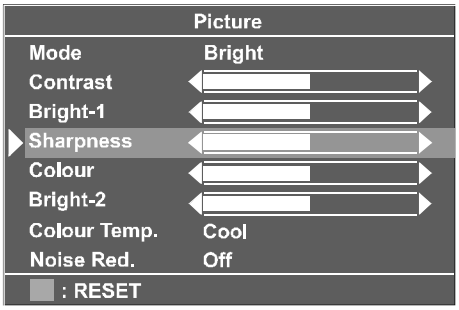


Setting Sharpness

• Using "▲" or "▼" button select Sharpness.

• Press "▶" button to increase sharpness level.

• Press "◀" button to decrease sharpness level.

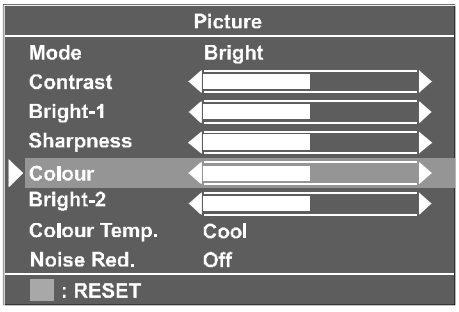


Setting Colour

• Using "▲" or "▼" button select Colour.

• Press "▶" button to increase colour level.

• Press "◀" button to decrease colour level.

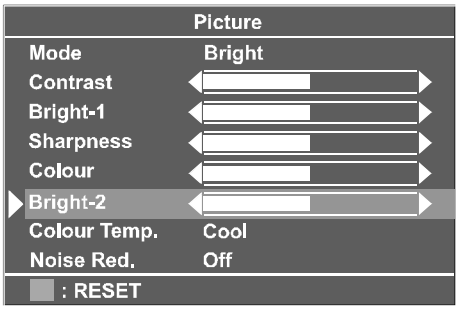


Setting Bright-2

Using"▲" or "▼" button select Bright-2.

• Press "▶" button to increase the back light.

• Press "◀" button to decrease the back light.



Setting Colour Temp.

• Using "▲" or "▼" button select Colour Temp.

• Press "◀" or "▶" button to select "Warm", "Cool" or "Normal".

Setting Noise Reduction

• Using "▲" or "▼" button select Noise Reduction.

• Press "◀" or "▶" button to select Noise Reduction level "**Off**" or "**Minimum**" or "**Medium**" or "**Maximum**

Note 1:

At low signal level, the changings on the Noise Reduction function are not effective when there is menu on the screen. If the menu is removed, the effect of this function is seen. At normal broadcasting, Noise Reduction changings are effective at once.

Note 2:

At moving pictures, while Noise Reduction is at maximum level, some picture distortions may occur. If Noise Reduction is set to medium or minimum, the picture will improve.

Setting Hue

During Playback NTSC system, this will appear in AV mode only when NTSC video source is applied. Otherwise, HUE option is invisible in Picture menu in TV mode :

• Using "▲" or "▼" button select Hue.

• Press "▶" button to increase hue level.

• Press "◀" button to decrease hue level.

Center value is indicated with one arrow.

Reset

Press BLUE button to reset the picture modes to factory default settings.

To Store the Settings

In the Picture Menu, all settings are stored automatically.

Sound Menu

To change sound settings

As you enter the main menu, sound will be the second item. In the main menu, select **Sound** using "▲" or "▼" button, then enter the sound menu pressing "◀" / "▶" or **"OK"** button.

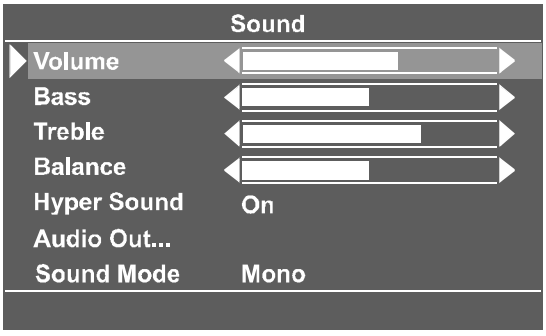
Setting Volume:

As you enter the sound menu, Volume will be the first selected option.

• Press "▶" button to increase volume.

• Press "◀" button to decrease volume.

Or you can directly change the volume settings using "◢ **+**" (to increase) or "**-** ◢" (to decrease) button.



Setting Bass Level

• Using "▲" or "▼" button select Bass Level.

• Press "▶" button to increase bass level.

• Press "◀" button to decrease bass level.

Setting Treble Level

• Using "▲" or "▼" button select Treble

• Press "▶" button to increase treble level.

• Press "◀" button to decrease treble level

Setting Balance

It allows adjusting the distribution between the left and right speakers.

• Using "▲" or "▼" button select Balance.

• Press "▶" button to change balance rightward.

• Press "◀" button to change balance leftward.

Hyper Sound

• Using "▲" or "▼" button select Hyper Sound

• Pressing "◀" or "▶" button will turn on or off this feature.

Pseudo/spatial effect can be turned on or off via the Hyper Sound item in the Sound menu or by remote control. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels. Hyper Sound selection will be displayed on the screen when the TV Status button is pressed or programme is changed.

To Change Audio Out Settings

Audio Out is a sub-menu of Sound menu.

Use this settings to adjust volume for audio out terminal which is located at the right side of the TV.

• Using " ▲ " or " ▼ " button select Audio Out.

• Press " ◀ " or " ▶ " button or directly press "**OK**" button on Audio **Out**, to enter the Audio Out menu.



Audio Out Volume

• As you enter the Audio Out sound menu, Volume will be the only option.

• Press " ▶ " button to increase volume.

• Press " ◀ " button to decrease volume.

Selecting Mode

• Using " ▲ " or " ▼ " button select Mode.

• Press " ◀ " or " ▶ " button to change Mode.

You can choose **Mono**, **Stereo** or **Dual (I-II)** mode, only if the selected channel supports that mode.

You can also change sound mode directly pressing "**I-II**" button on your remote control.

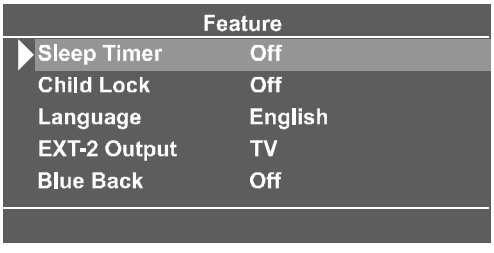
In case of bilingual broadcast (Dual Sound), you can select original or dubbed language using mode option.So when somebody listens to the original language from the loudspeakers, somebody else can listen to the dubbed language from headphone.

To Store The Settings

In the Sound Menu, all settings are stored automatically.

Feature Menu

Press "**MENU**" button, now you are in mainmenu. In the main menu, select **Feature** using " ▲ " or " ▼ " button. Then enter the Feature menu pressing " ◀ " / " ▶ " or "**OK**" button.



Sleep Timer

The Sleep Timer is used to turn the TV off after a defined period of time after selecting this item. The timer can be programmed between Off and 120 minutes in steps of 10 minutes. (Off, 010, 020, 030, 040, ... , 120)

If sleep timer is activated, at the end of the selected the time, the TV goes automatically to stand-by mode.

Child Lock

You can use this feature to prevent children turning on/off TV or changing programmes or adjustments etc. without remote control.

• Using " ▲ " or " ▼ " button select Child Lock.

• Press " ◀ " / " ▶ " button to select Child Lock **On** or **Off**.

The **Child Lock** feature can be set **On** or **Off** by " ◀ " / " ▶ " button. When **Off** is selected, there will be no difference in the operation of your TV. When **On** is selected, the TV can only be controlled by the remote control handset. In this case the control panel buttons except "⏻" button on the right side of the TV will not work.

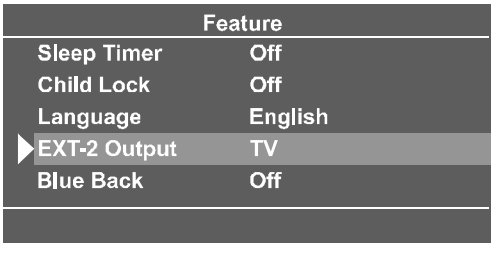
Selecting Menu Language

• Using " ▲ " or " ▼ " button select Language.

• Press " ◀ " or " ▶ " button to select menu language.

EXT-2 Output

From EXT-2 Output; **TV**, **EXT-1** or **EXT-4** can be given. These modes can be chosen by pressing " ◀ " or " ▶ " button on "**EXT-2 OUTPUT**".



Blue Back (During No Signal)

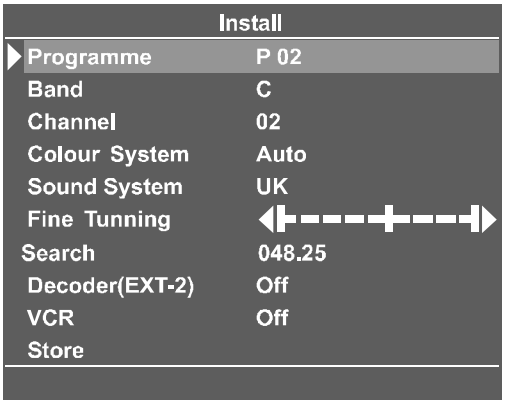
The Blue Back Feature can be set by " ▲ " or " ▼ " button to either On or Off

To Store Settings

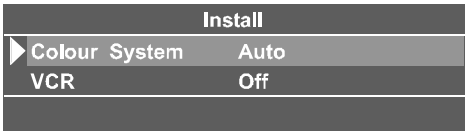
In Feature menu all settings are stored automatically.

Install Menu

Press "**MENU**" button, now you are in main menu. In the main menu, select "**Install**" using ▲" or "▼" button. Then enter the Install menu pressing"◀" / "▶" or "**OK**" button.



In EXT mode, Install menu appears like this:



You can change only Colour system and VCR.

Selecting Programme

- Using "▲" or "▼" button select Programme.
- To select programme number, you can use "◀" / "▶" button or Digit Buttons

Selecting Band

Band, can be chosen either,

- "C" or "S" by "◀" or "▶" button.

Selecting Channel

Channel can be changed by "◀" or "▶" button or by Digit Buttons.

Selecting Colour System

Using "◀" or "▶" button on **Colour System**, you can change the colour system to **PAL, SECAM** or **Auto**.

Note: In EXT mode, you can choose NTSC 3.58 and NTSC 4.43 as well.

Selecting Sound System

Using "◀" or "▶" button on **Sound System**, you can change the standard to **BG, DK, I, L, Lp**.

Selecting Fine Tuning

You can use the Fine Tuning process for fine adjustment (after coarse adjustment), if you are not happy about the image on the screen.

Use "◀" or "▶" button on **Fine Tuning** item, until getting the best image on the screen.

Selecting Search

To start the search process, press "▶" button for forward search or "◀" button for backward search. If a signal is found or reaches to end of the band after searching, press "◀" or "▶" buttons to continue search process. To stop the search process when you want, press "◀" or "▶" buttons at any time.

Decoder (EXT-2)

You can use this mode to connect any decoder to your TV.

- Press the"◀" or "▶" buttons to set it "**On**" or "**Off**".

When you select Decoder(EXT-2) "**On**", EXT-2 output will be chosen as TV mode only and any scrambled channels will be unscrambled through decoder connected your TV via EXT-2 output.

Setting VCR (Video Cassette Recorder) Mode

- This item can be seen in **TV, EXT-1**, **EXT-2**, **EXT-3** and **EXT-4** modes.
- If you want to watch a **VCR** source from one of these modes, then it will be better to set **VCR** mode "on". For this, while the cursor is on this item press the"◀" or "▶" buttons to set it "**On**".
- If you want to watch a **DVD** , then you must set this item "off"; because **DVD** is not a source like a **VCR** and to see the picture better, you must set the **VCR** mode "**Off**".

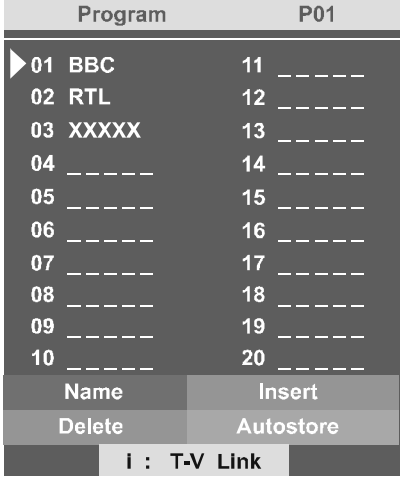
To Store Settings

- Press "◀" / "▶" or "**OK**" button on **Store** option to store Install menu settings.
- After stored, T-V LINK menu will appear. If you do not need to do T-V LINK, press BLUE button to exit the menu.

Program Menu

Press "**MENU**" button, now you are in main menu. In the main menu, select "**Program**" using "▲" or "▼" button. Then enter the Programme menu, press "◀" / "▶" or "**OK**" button.

Note: There is no Program menu in any EXT modes.



Program Menu is used to delete a channel, to change the programme number of a channel, to give a channel name to a channel, and to start the A.P.S (Autostore) function.

To choose a channel in the PROGRAM menu

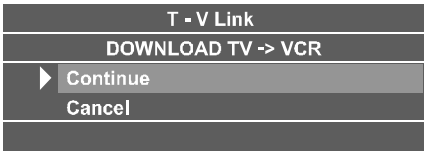
Press "▲" / "▼" / "◀" / "▶" button. The programme number that you choose is highlighted in the Program.

Caution:

Using "Delete" or "Insert" function rewrite the current channel list in the Program menu. Therefore, the programme numbers of some of channels will change.

When you complete the settings of Program menu:

If you have a T-V LINK compatible VCR, press "ⓘ" button to display the T-V LINK menu. then follow the operating procedure "**Downloading the data to VCR**"



If you do not have a T-V LINK compatible VCR, press BLUE button to exit the menu.

To give a channel name (NAME):

1. Choose the channel you want to give a channel name.
2. Press the RED button to enter the NAME mode.
3. Press "◀" or "▶" button to choose the position,and press "▲" or "▼" button to choose each character of channel name.
4. Press the RED button to store the channel name.

- To cancel the NAME mode, press the BLUE button.

To delete a channel (DELETE):

1. Choose the channel you want to delete.
2. Press the YELLOW button to enter the DELETE mode.
3. Press the YELLOW button to delete it.

- To cancel the DELETE mode, press the BLUE button.

To change the programme number of a channel (INSERT)

1. Choose the channel you want to change the programme number.
2. Press the GREEN button to enter the INSERT mode.
3. Press "▲" / "▼" / "◀" / "▶" button to choose new programme number.
4. Press the GREEN button to insert the channel to the chosen programme number.

Autostore:

To enter Autostore menu, press the BLUE but-

ton. To learn the features of this function see "**Autostore**" below.

Autostore, searches and stores all channels automatically on your TV, according to the transmission of programme systems in your area.



First of all choose the "**Country**" by using "◀" or "▶" button.

After Autostore is finalized, a programme list will appear on the screen. In the program list you will see the programme numbers and names assigned to the programmes.

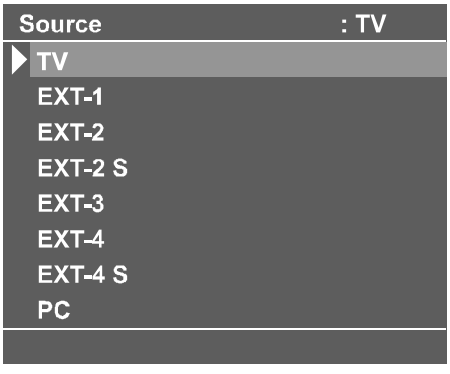
If you do not accept the locations and/or the programme names of programmes, you can change them in Programme menu.

Source Menu

You can switch your TV to EXT modes by pressing directly to "**AV**" button or by selecting in source menu from the main menu.

While in EXT mode, you can also switch your TV to TV or other EXT modes by selecting in source menu from the main menu.

In main menu, firstly use "▲" or "▼" button then use "◀" / "▶" or "**OK**" button to enter Source menu. In source menu, move the cursor by "▲" or "▼" button and then press "**OK**" button or "◀" / "▶" buttons when the cursor is on the required item. The selected mode comes automatically on the screen.



Other Features

TV Status

Programme Number, **Programme Name** (or **EXT**), (they are displayed on the upper left of the screen). The **sound indicator** is displayed with them too. They are displayed after programme change during 3 seconds.

Sound Indicator

The alternatives of the indicator are Mono, Stereo, Dual I and Dual II. This indicator is displayed under the programme number indicator on the screen. "**I-II**" button is used to select Mono or Stereo, or Dual I or Dual II.

Mono

In Mono broadcast or in forced-mono (for stereo broadcast).

Stereo

In Stereo broadcast.

Dual I

If dual broadcast detected. Dual I is selected in default and also can be selected after Dual II by Remote Control.

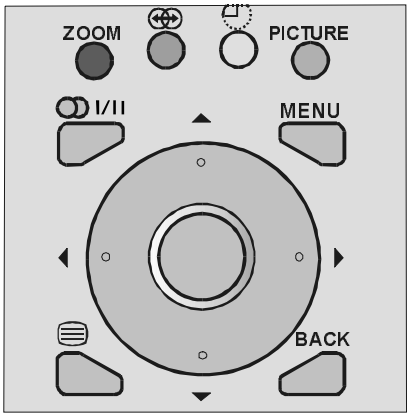
Dual II

If Dual II selected by Remote Control.

Hyper Sound

By selecting Hyper Sound in sound menu or by pressing the "⟲" button on your remote control, Pseudo/Spatial effect can be turned on or off. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels. Hyper Sound selection will be displayed on the screen when the TV Status button is pressed or programme is changed.



Picture Mode

Picture mode OSD is displayed when BLUE button is pressed. Picture mode can be changed to standard, soft, and bright.

Sleep Timer

Sleep Timer mode OSD is displayed when YELLOW button is pressed.

The Sleep Timer is used to turn the TV off after a defined period of time after selecting this item. The timer can be programmed between Off and 120 minutes in steps of 10 minutes. (OFF, 010, 020, 030, 040, ... , 120)

If sleep timer is activated, at the end of the selected the time, the TV goes automatically to stand-by mode.

Mute Indicator

It is placed in the upper middle of the screen when enabled, and it stays there until it is disabled.



To cancel mute, there are two alternatives; the first one is by pressing the "🔇" button, this volume is set to the preceding value, and the second one is increasing the volume level. By decreasing the volume level in mute state, mute will not be ignored, only the volume level will decrease.

No-Signal Detection (TV mode)

If no valid signal detected, it takes 5 minutes to switch to the Stand-By mode unless any signal detected or any Remote Control command is accessed.

After a Remote Control command (if No-Signal Timer is active) the timer stops and if no signal detected again the timer is initialized to 5 minutes and starts 3 seconds later again to count down.

It is not valid in EXT modes.

No-Signal and Out Of Range Detection (PC mode)

In PC Mode,as no menu is displayed,in case that there is no PC input to the TV,it is displayed an OSD message:

No input signal detected

then the power lamp turns to amber and PC will be in PC standby mode. Press AV button, digit buttons or "P∨" / "P∧" buttonsto exit standby mode.

In PC Mode,as no menu is displayed,in case that there is no PC input to the TV, but the resolution and the vertical frequency is not supported by the concept, it is displayed an OSD message:

Signal out of range

Volume Bar

It is displayed in the lower middle of the screen. When a volume command is received (pressing **"◢ +"** or **"◢ -"** by Remote Control or Control panel at the top of the TV) and no menu is active, it stays on the screen for 3 seconds, after the last volume command or until another command is received in between.



EXT Modes

By pressing the "**AV**" button you can switch your TV to EXT modes (except being in Teletext). Pressing this button will consecutively switch the TV in one of the optional EXT modes: **EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S** and **PC**.

In order to quit the EXT mode press any digit buttons or **"P∨"** or **"P∧"**

Zoom Modes

Zoom mode can be changed by pressing Red button. You can change the screen size according to the picture aspect ratio. Select the optimum one from the following **ZOOM** modes.

AUTO:

When a **WSS (Wide Screen Signalling)** signal, which shows the aspect ratio of the picture, is included in the broadcast signal or the signal from an external device, the TV automatically changes the **ZOOM** mode to **16:9 ZOOM** mode **PANORAMIC** or **FULL** mode according to the **WSS** signal.

- When the **AUTO** mode does not function correctly due to poor **WSS** signal quality or when you want to change the **ZOOM** mode, change to another **ZOOM** mode manually.

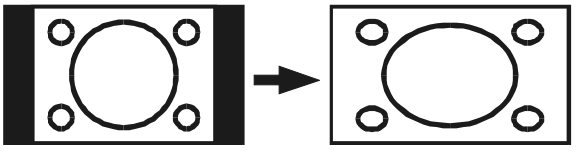
Using the different screen formats

Press the Red button to select the different modes: AUTO,FULL, REGULAR, PANORAMIC, 14:9 ZOOM, 16:9 ZOOM, 16:9 ZOOM SUBTITLE modes.

Note: *You can only choose REGULAR and FULL in PC mode*

FULL:

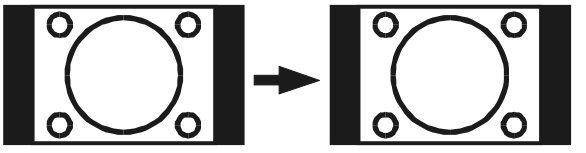
This uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.



- For 16:9 aspect ratio pictures that have been squeezed into a normal picture (4:3 aspect ratio), use the **FULL** mode to restore the picture to its original shape.

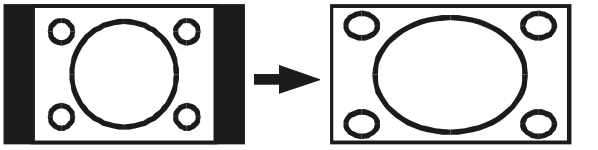
REGULAR:

Use to view a normal picture (4:3 aspect ratio) as this is its original shape.



PANORAMIC:

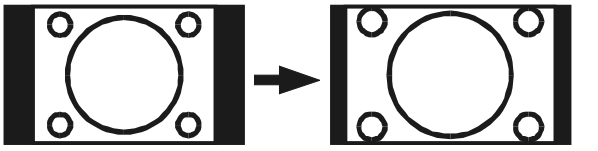
This stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the screen, without making the picture appear unnatural.



The top and bottom of the picture are slightly cut off.

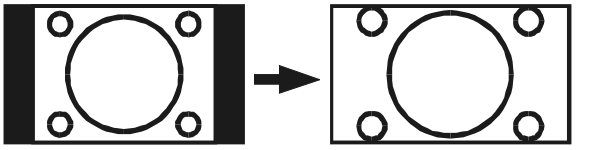
14:9 ZOOM:

This zooms up the wide picture (14:9 aspect ratio) to the upper and lower limits of the screen.



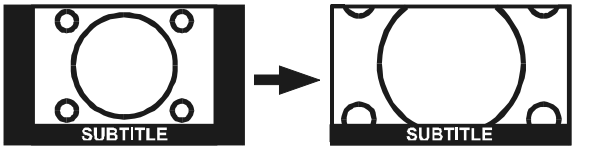
16:9 ZOOM:

This zooms up the wide picture (16:9 aspect ratio) to the full screen.



16:9ZOOM SUBTITLE:

This zooms up the wide picture (16:9 aspect ratio) with subtitles to the full screen.

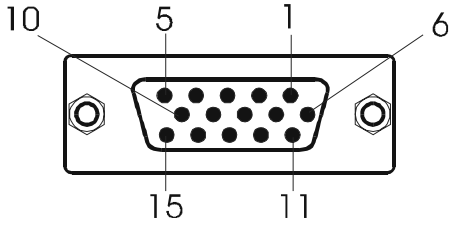


PC Mode

Installation

- Power off both Computer and Display before making any connections.
- Set your PC's resolution correctly before connecting to the TV. See the table in page 30 for supported modes.
- Use a D-SUB cable to connect the TV's PC input to the computer's RGB output terminal. If you want to listen to the sound from the computer, use an audio cable to connect the PC AUDIO IN to the computer's sound output terminal.

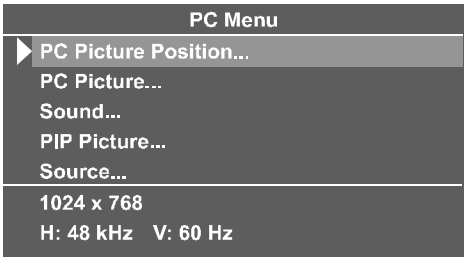
15 Pin Mini D-Sub Connector



- Tighten the screws of the Display cable until the connectors are fastened securely (finger-tighten only).

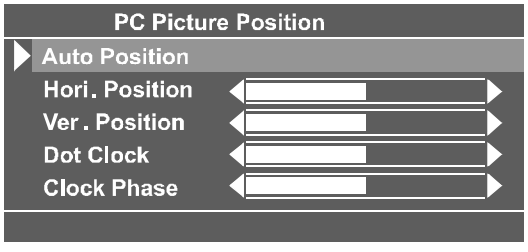
Main Menu in PC mode:

Enter the main menu by pressing the "**MENU**" button on the remote control.



PC Picture Position Menu:

In the Main menu, select "**PC Picture Position**" using "▲" or "▼" button, then enter the menu pressing "◀" / "▶" or "**OK**" buttons..



Auto Position

If you shift the picture horizontally or vertically to an unwanted position, use this item to put the picture into correct place automatically.

- Select Auto position item by using "▲" or "▼" buttons.
- Press "**OK**" button.
- Press "**MENU**" button or "**BACK**" button to store the value.

Warning: Auto position adjustment recommended to be done with the full screen image for the proper adjustment.

Horizontal Position

This item shifts the image horizontally to right hand side or left hand side of the screen.

- Select Hor. Position item by using "▲" or "▼" button.
- Use "◀" or "▶" button to adjust the value.
- Press "**MENU**" button or "**BACK**" button to store the value.

Vertical Position

This item shifts the image vertically towards the top or bottom of the screen.

- Select Ver. Position item by using "▲" or "▼" button.
- Use "◀" or "▶" button to adjust the value.
- Press "**MENU**" button or "**BACK**" button to store the value.

Dot Clock

Dot Clock adjustments correct interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.

- Use "◀" or "▶" button to adjust the value.

Clock Phase

Depending on the resolution and scan frequency that you input to the TV Set, you may see a muddy or noisy picture on the screen. In such a case you can use this item to get a clear picture by trial and error method.

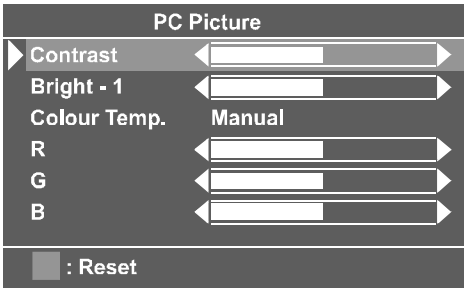
- Use "◀" or "▶" button to adjust the value.

PC Picture Menu

In the Main menu, select "**PC Picture**" using "▲" or "▼" button, then enter the PC Picture menu pressing "◀" / "▶" or "**OK**" buttons.

Contrast, Bright-1 and Colour Temperature adjustments in this menu are identical to adjustments defined in TV picture menu.

R, G, and B adjust the TV image colour in PC mode. You can change the TV colour to your desired colour: R (Red), G (Green), B (Blue)



Sound Menu

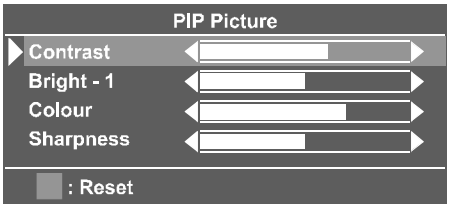
In the main menu select "Sound" using "▲" or "▼" button then enter the Sound menu pressing "◀" / "▶" or "**OK**" buttons.

The items in this menu are described at Sound menu starting page 16.

PIP Picture

In the Main menu, select "**PIP Picture**" using "▲" or "▼" button, then enter the PIP Picture menu pressing "◀" / "▶" or "**OK**" buttons.

This menu is displayed when PIP is displayed on the screen and otherwise "**PIP No Signal**" message will be displayed at the bottom of menu.



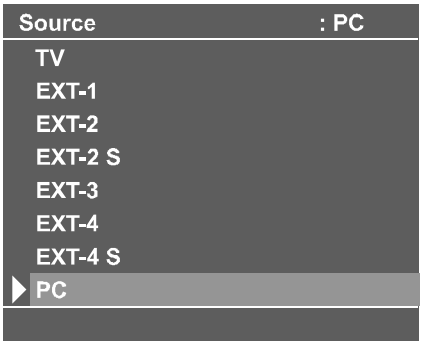
PIP picture is displayed on the screen with "" button. By pressing "**OK**" button, PIP window is selected. PIP position is changed by "" button. There are four different PIP positions. PIP size is changed by "" button. Two different PIP size are available.

Programme in the PIP window is increased / decreased by "P∨ / P∧" , digit buttons or AV button. All EXT modes (Except EXT-3) are also available in PIP window. PIP window is removed from the screen by "" button.

The items in this menu are described at Picture menu starting page 14.

Source Menu

In the Main menu, select "**Source**" using "▲" or "▼" button, then enter the Source menu pressing "◀" / "▶" or "**OK**" buttons.



Select the available sources of **TV, EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S** or **PC** using "▲" or "▼" button and by pressing "◀" / "▶" or "**OK**" buttons.

Sound in PC mode

- Connect the PC's Audio output to the TV's **PC Audio In** socket with an audio cable.
- On your remote control,using "♪" button to select sound source from **TV, EXT-1, EXT-2, EXT-3, EXT-4** and **PC** options.
- When PIP is displayed on the screen, "♪" allows you to switch sound between PC and selected PIP source.

Teletext

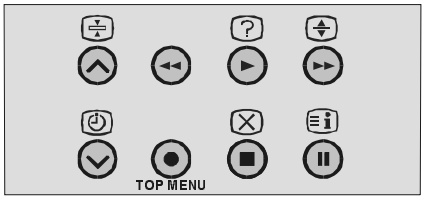
Teletext is an information system that displays text on your TV screen. Using the Teletext information system you can view a page of information on a subject that is available in the list of contents (index).

On screen display is not available in text mode.

Contrast, brightness or colour control is not available, but volume control is available in text mode.

To operate Teletext

- Select a TV station on which Teletext is being transmitted.
- Press (TELETEXT) "" button. Usually the list of contents (index) is displayed on the screen.



To select a page of Teletext

- Press the appropriate digit buttons for the required Teletext page number.

The selected page number is displayed at the top left corner of the screen. The Teletext page counter searches until the selected page number is located, so that the desired page is displayed on the screen.

- Press "P∧" button to move the Teletext screen forward one page at a time.
- Press "P∨" button to move the Teletext screen backward one page at a time.

To Select Index Page

- To select the page number of the index (generally page 100), press "" button.

Searching for a teletext page while watching TV

- In the Teletext mode pressing "" button will switch the screen to the TV mode. In the TV mode enter a page number using digit buttons. As you enter last digit of page number, "" sign will replace the page number and flash until the entered page number is found. Then the page number will replace "" sign again. Now you can display this teletext page pressing "" button.

To Select Double Height Text

- Press "" button for the top half of the information page to be displayed in double height text.
- Press "" button again for the bottom half of the information page to be displayed in double height text.
- Press "" button once more for the full page of normal height text.

To Reveal "concealed" Information

- Pressing "" button once will reveal answers on a quiz or games page.
- Pressing "" button again will conceal the revealed answers.

To Stop Automatic Page Change

The teletext page you have selected may contain more information than what is on the screen; the rest of the information will be displayed after a period of time.

- Press "" button to stop the automatic page change.
- Press "" button again to allow the next page to be displayed.

To Select a Subcode Page

Subcode pages are subsections of long Teletext pages that can only be displayed on the screen one section at a time.

- Select the required Teletext page.
- Press "" button.
- Select the required subcode page number by pressing four digit buttons (e.g. 0001).
- If the selected subcode page is not displayed in a short time, press "" button. TV programme will be displayed on the screen.
- Teletext page number will be displayed on

the upper left corner of the screen when the selected page is found.

• Press "⊗" button to display the selected Teletext page.

To exit Teletext

• Press "≡" button. The screen will switch to TV mode.

Fastext and Toptext

Your TV supports the 7 page Teletext system. When the page number of any of the 7 pages in memory is entered, the system will not search for the requested page; instead it will display the page automatically.

• Press "P∧" button to move the Teletext screen forward one page at a time.

• Press "P∨" button to move the Teletext screen backward one page at a time.

For Fastext and Toptext

The subject-heading for the information may have a particular colour.

• Press an appropriate **RED**, **GREEN**, **YELLOW** or **BLUE** button in order to reach the relevant page quickly.

For TOPTEXT

If Toptext transmission is present, colour coded buttons will appear in status row.

If Toptext transmission is not present, status row will not appear.

In Toptext mode the "P∧" or "P∨" commands will request the next or previous page respectively. If Toptext transmission is not available, in case of operation of these commands, wraparound occurs. For example page 100 appears to be one greater than page 199.

Peripheral Equipment Connections

There is a wide range of audio and video equipment that can be connected to your TV.

Connection diagrams at the and of this section show you where the different equipment should be connected at the back side of the TV.

Via the Euroconnector

Your TV set has 2 Euroconnector sockets. If you want to connect peripherals (e.g. video, decoder, etc.) which have Euroconnectors, to your TV, use **SCART** input.

If an external device is connected via Euroconnector sockets TV is switched to AV mode automatically. In this case if both sockets are connected **SCART** has the precedence.

T-V LINK compatible VCR

Be sure to connect the T-V LINK compatible VCR to the **EXT.2** terminal. If not, the T-V LINK function will not work properly.

• When connecting a T-V LINK compatible VCR to the EXT.2 terminal, be sure to connect the decoder to the VCR. If not, the **T-V LINK** function may not work properly. And then set the **Decoder (EXT-2)** function for the channel to **ON** to unscramble a scrambled channel.

RGB mode

If an equipment can output the **RGB** signals, connect it to the **EXT-1** or **EXT-2** terminal.

EXT-2 S Mode

If the equipment connected to your TV set supports S-Video (Y/C) output from Euroconnector, you can have a better picture quality by selecting **EXT-2 S** mode and connecting your equipment to the **EXT.2 (EXT-2 S)** terminal of TV. See your equipment's booklet to check if your equipment has such feature.

Via the RCA jacks

If you have an equipment (such as a Camcorder) which has the RCA jacks, connect it to the **EXT-4** terminal with the video and audio cables.

If you have a device which outputs component

signal, connect it to the EXT-3 terminal with a component video cable.

Via the ANT (aerial) socket

If your equipment does not have an Euroconnector or RCA jacks, connect it to the TV with an aerial cable. For details, see the manual provided with the equipment.

- To store the test signal that comes from the equipment, see "**Install Menu**" on page 18 and store it to the program number 0. You can watch images from that equipment to select the program number which you stored the test signal.

Decoder

Cable TV offers you a wide choice of programmes. Most of them are free, others are to be paid for by the viewer. This means that you will need to subscribe to the broadcasting organisation whose programmes you wish to receive. This organisation will supply you a corresponding decoder unit to allow the programmes to be unscrambled.

For further information ask your dealer. See also the booklet supplied with your decoder.

Connect a decoder with an aerial socket to the TV

- Connect the aerial cable.

Connect a decoder without an aerial socket to the TV

- Connect the decoder to your TV with a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack). When your decoder has a Euroconnector / RCA Jack you can obtain better picture quality if you connect a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack).

TV and Video Recoder (VCR)

- Connect the Video Recorder to the ANT (antenna input) socket of the TV with the aerial cable.
- Connect the Video Recorder to the **EXT-1** or **EXT-2** terminal with the SCART cable, or connect it to the **EXT-4** terminal with the audio and video cables.

NTSC Playback

Connect a NTSC video recorder to a terminal. Then press "**AV**" button to select the corresponding AV mode.

INTSC 3.58/4.43 system is detected automatically in AV mode.

Camera and Camcorder

To connect to the EXT-4 terminal

Connect your camera or camcorder at the back side of your TV.

- Connect your equipment to the TV via **VIDEO** (yellow), **AUDIO R** (red) and **AUDIO L** (white) inputs. You should connect the jacks to the input in the same colour.

Connect the decoder to the video recorder

Some video recorders have a special euroconnector for decoder.

- Connect a eurocable to the euroconnector of your decoder and to the special euroconnector of your video recorder. See also the handbook of your video recorder.
- To connect your video recorder to the TV, see TV and Video Recorder section.

If you want to connect more equipment to your TV, consult your dealer.

Connecting Headphones

Use the stereo headphone socket on the right side of your TV, to connect headphones.

Connecting the PC

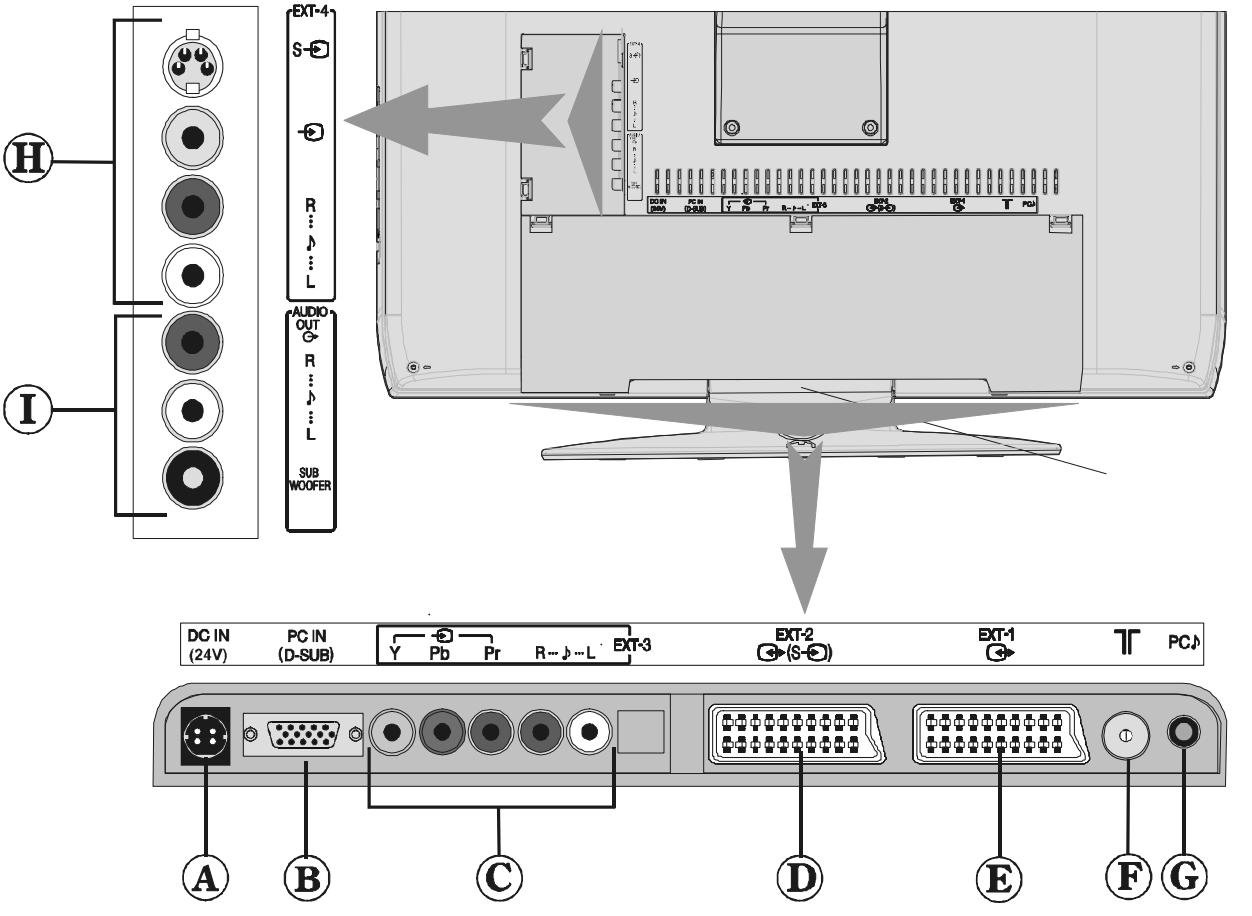
Connect PC monitor with 15-pin PC cable to the 15-pin connector on the rear of the computer. For detail installation procedure see **Installation** in PC mode.

To connect to S-Video input

Connect your camera or camcorder at the back side of your TV.

- Connect your equipment to the TV via S-Video input at the back side by using S-Video cables.

Peripheral Equipment Connections



Ⓐ DC 24 V



Ⓑ PC INPUT

Ⓒ EXT-3
- Y
- Pb
- Pr
- Component Audio In R
- Component Audio In L

Ⓓ EXT-2

Ⓔ EXT-1

Ⓕ ANTENNA

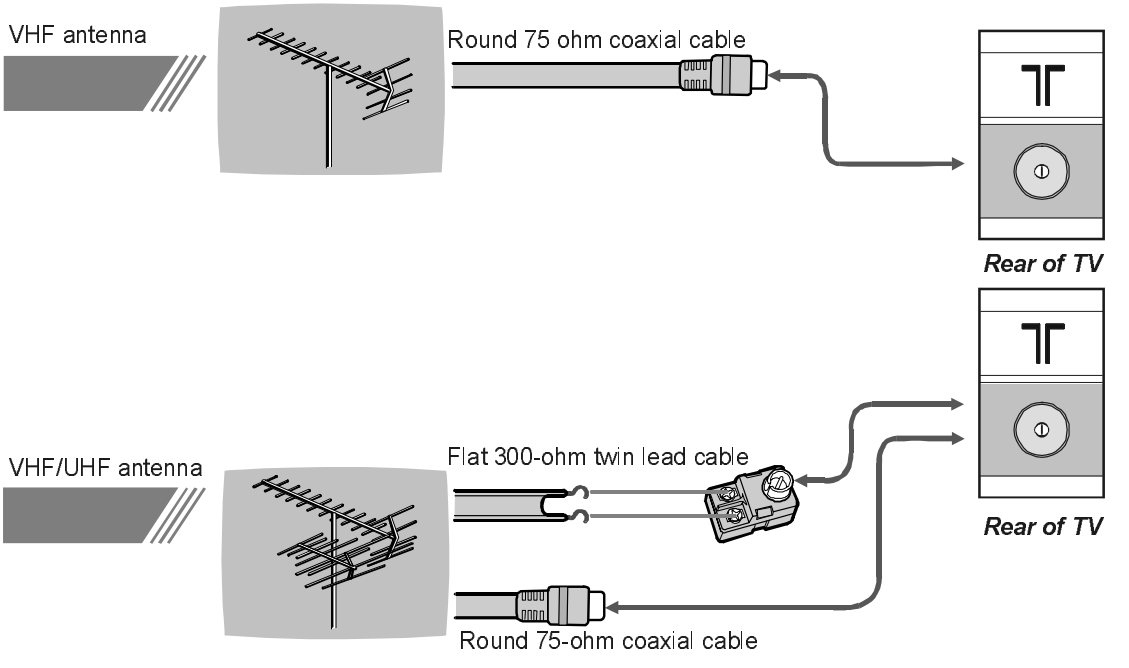
Ⓖ PC AUDIO IN

Ⓗ EXT-4
- S-Video In
- Video In
- Audio R
- Audio L

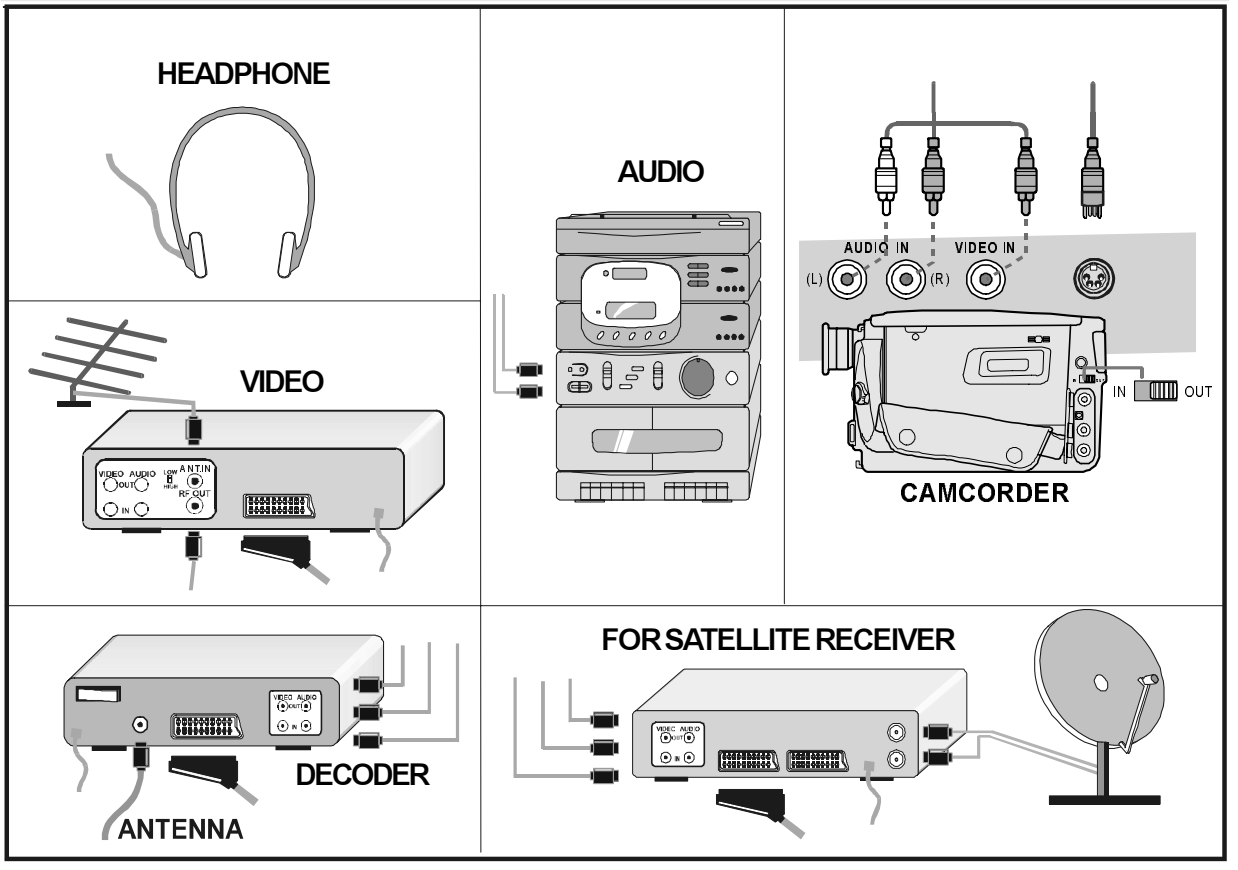
Ⓘ AUDIO OUT TERMINAL
- Audio R
- Audio L
- Subwoofer Out

Antenna Connections

Outdoor Antenna Connections



Peripheral Equipment Connections



PC Input Typical Display Modes

The display has a maximum resolution of 1360 x 768, vertical sync. frequency range of 50-75 Hz and a horizontal sync. frequency range of 30-69 KHz.

The following table is an illustration of some of the typical video display modes.

Mode	Resolution		Frequency		Sync. Polarity	
	Horizontal	Vertical	Hor. (kHz)	Ver. (Hz)	Hor.	Ver.
1	640	400	31.5	60	-	+
2	640	400	31.5	70	-	-
3	640	480	31.5	60	-	-
4	640	480	37.9	72	-	-
5	640	480	37.5	75	-	-
6	720	400	31.5	70	-	+
7	800	600	35.2	56	+	+
8	800	600	37.9	60	+	+
9	800	600	48.1	72	+	+
10	800	600	46.9	75	+	+
11	1024	768	48.4	60	-	-
12	1024	768	56.5	70	-	-
13	1024	768	60.0	75	+	+
14	1280	720	44.6	60	-	+
15	1360	768	47.7	60	+	+

The native resolution of the TFT-LCD Panel is 1360 x 768. Therefore using Mode 15 is advised to get the best PC input display quality.

Tips

Care of the Screen

Clean the screen with a slightly damp, soft cloth. Do not use abrasive solvents as they may damage the TV screen coating layer

Colors of image on screen are abnormal

Have you selected the correct TV system? Is your TV set or house aerial located too close to the loudspeakers, non-earthed audio equipment or neon lights, etc. ?

Mountains or high buildings can cause double pictures or ghost images. Sometimes you can improve the picture quality by changing the direction of the aerial.

Is the picture or Teletext unrecognisable? Check if you have entered the correct frequency.

The picture quality may degrade when two peripherals are connected to the TV at the same time. In such a case, disconnect one of the peripherals.

No Image on Display Screen

Is the aerial connected properly? Are the plugs connected tightly to the aerial socket? Is the aerial cable damaged? Are suitable plugs used to connect the aerial? If you are in doubt, consult your dealer.

No Image means that your TV is not receiving any transmission. Have you pressed the correct buttons on the remote control? Try once more.

PC Picture

If no PC picture appears, check that the D-SUB cable is connected properly. Check that your PC's resolution set correctly. See **page 30** for supported modes.

Sound

You can not hear any sound. Did you perhaps interrupt the sound, pressing "🔇" button? Are external speakers connected to the TV?

Sound is coming from only one of the speakers. Is the balance set to one direction extreme? See **Sound** menu.

Remote Control

If your TV no longer responds to the remote control, perhaps the batteries are exhausted. Replace the batteries.

Have you selected the wrong menu? Press "**MENU**" button to return to normal screen or press "**BACK**" button to return to the previous menu.

No solution

Switch your TV set off and on. If this does not work, switch off, remove the mains plug and call the service personnel; never attempt to repair it yourself.

Specifications

Item / Model	LT-23C50BU	LT-23C50SU
Broadcasting Systems	PAL SECAM BG, DK, I, L, Lp	
Channels and Frequencies	VHF (VL) 46,25 MHz - 168,25 MHz VHF (VH) 175,25 MHz - 463,25 MHz UHF 471,25 MHz - 863,25 MHz Cable TV (S1-S20/ S21-S41)	
Input Signal	**Video:** Analog 0,7 Vp-p 75 ohm positive **Sync:** TTL Level positive or negative, Seperate sync.	
Horizontal Timing	30 - 69 KHz	
Vertical Timing	50 - 75 Khz	
Dot Rate	78,75 MHz max.	
Panel Size	23,01" (583,1 mm) (measured diagonally)	
Visible Picture Size	508,5 mm horizontal x 286,1 mm vertical	
Display Resolution	1360 x 768 max. (WXGA)	
Number of Preset Channels	100	
Channel Indicator	On Screen Display (OSD)	
RF Aerial Output	75 Ohm (unbalanced)	
Power Requirements	**Adaptor:** 100-240 V AC, 50 Hz / **TV:** 24 V DC	
Power Consumption (W)	108 W (max) / STAND-BY <3W	
Sound Systems	German , Nicam Stereo	
Audio Output	2 x 5 $W_{RMS.}$ (%10 THD)	
EXT-1 Terminal	Euroconnector (21-pin, SCART 1) (bottom of the cabinet) • Video Input, Audio L/R Inputs and RGB inputs are available. • TV broadcast outputs (Video and Audio L/R) are available.	
EXT-2 Terminal	Euroconnector (21-pin, SCART 2) (bottom of the cabinet) • Video Input, S-VIDEO (Y/C) input, Audio L/R and RGB inputs are available. • Video and Audio L/R outputs are available. • T-V LINK functions are available.	
EXT-3 Terminal	RCA connectors x 5 (bottom of the cabinet) • Component video (Pr, Pb, Y) inputs and Audio L-R inputs are available	
EXT-4 Terminal	RCA connectors x 3 (side of the cabinet) S-VIDEO connector x 1 (side of the cabinet) • Video input, S-VIDEO (Y/C) input and Audio L/R inputs are available.	
AUDIO OUT Terminal	RCA connectors x 3 • Audio L/R output are available. • Subwoofer out is available.	
PC IN terminal	Analog RGB D-SUB 15 x 1 • PC signal is available (refer to page 30 for details of the signals which can be input)	
PC AUDIO IN terminal	Stereo mini-jack (3.5 mm diameter)	
Dimensions (W x H x D)	614 mm x 482 mm x 240 mm 614 mm x 438 mm x 79 mm (TV only)	
Weight	7,4 kg (with stand) / 6,4 kg (TV only)	
Accessories	Remote control unit x 1 (RM-C1860) - AA/R6 dry cell battery x 2 AC adapter x 1 Power cord x 1	
Headphone jack	Stereo mini-jack (3.5 mm diameter)	

JVC

ENGLISH

InteríArt

LT-23C88SJ

WIDE LCD PANEL TV INSTRUCTIONS

JVC

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50059427

1004MKH-VT-VT

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For your safety

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured. So, please read the points below for your own safety. They are of a general nature, intended to help you with all your electronic consumer products and some points may not apply to the goods you have just purchased.

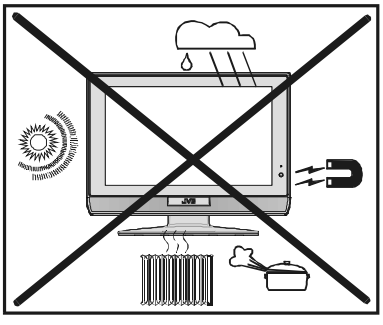
Some “DOs” and “DON’Ts” for you

Air Circulation…

Leave at least 10cm clearance around the television to allow adequate ventilation. This will prevent the TV from overheating and consequential possible damage to the TV. Dusty places should also be avoided.

Heat Damage…

Damage may occur if you leave the TV in direct sunlight or near a heater. Avoid places subject to extremely high temperatures or humidity, or locations where the temperature is likely to fall below 5ºC (41ºF).



Mains Supply…

The mains supply required for this equipment is **100-240 V AC, 50 Hz.** Never connect to a DC supply or any other power source. DO ensure that the TV is not standing on the mains lead. DO NOT cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance.

Hot / Moderate Climate Conditions

This device is suitable for working in hot and moderate climate conditions.

IF IN DOUBT PLEASE CONSULT A COMPETENT ELECTRICIAN.

DO…

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and inter-connections between pieces of equipment) are properly made and in accordance with the manufacturers' instructions.

Switch off and withdraw the mains plug before making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

DO NOT…

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T obstruct the ventilation openings of the equipment with items such as newspapers, table-cloths,

curtains etc. Overheating will cause damage and shorten the life of the equipment.

DON'T allow electrical equipment to be exposed to dripping or splashing or objects filled with liquids, such as vases, to be placed on the equipment.

DON'T place hot objects or naked flame sources, such as lighted candles or nightlights on, or close to the equipment. High temperatures can melt plastic and lead to fires.

DON'T use makeshift stands and NEVER fix legs with wood screws. To ensure complete safety, always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T listen to headphones at high volume, as such use can permanently damage your hearing.

DON'T leave equipment switched on when it is unattended, unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch the equipment off and make sure your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or it is damaged in any way – switch off, withdraw the mains plug and consult your dealer.

DON'T put the empty batteries into garbage instead of recycle bin to reduce harmfull effects to the environment.

ABOVE ALL – NEVER let anyone, especially children, push anything into holes, slots or any other openings in the case – this could result in a fatal electric shock.

NEVER guess or take chances with electrical equipment of any kind – it is better to be safe than sorry.

To fully disconnect the TV, switch off the mains socket and remove the Power plug.

Safety Precautions for Power adapter

- Be careful! May become hot.
- For indoor and dry location use only.
- Risk of electric shock.
- Shock hazard, do not open.
- Keep all power adapters away from any other heat source.
- Always use power adapter(s) well-ventilated area.

*** Cold cathode fluoresant lamp in LCD PANEL contains a small amount of mercury, please follow local ordinates or regulations for disposal.*

"The LCD panel is very high technology product with about a million thin film transistors, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. Please note that this does not affect the performance of your product." Please note that certain light guns used with games consoles may not work on this product.

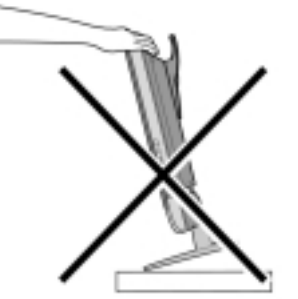
Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

WARNING

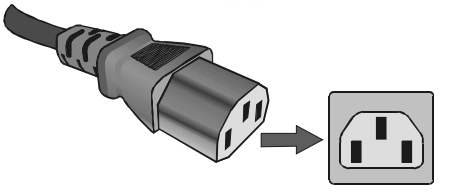
- *Fingers may be trapped under the TV causing injuries. Hold the TV at the bottom in the middle, and do not allow it to tilt up or down.*
- *The TV may fall causing injuries. Hold the bottom of the stand with your hand and tilt the TV up and down.*
- *Do not allow children to hang from the TV, place their elbows on the TV or lean against the TV. Doing so may cause the TV to fall over and lead to injuries.*





CAUTION:

- *To avoid electric shock or damage to the unit, first firmly insert the small end of the power cord into the AC Adapter unit it is no longer wobbly, and then plug the larger end of power cord into an AC outlet.*



Important Instruction

For your own safety read following instruction carefully before attempting to connect this unit to the mains supply.

MAINS (AC) OPERATION

The wires in this mains lead are coloured in accordance with the following code :

BLUE-NEUTRAL

BROWN-LIVE

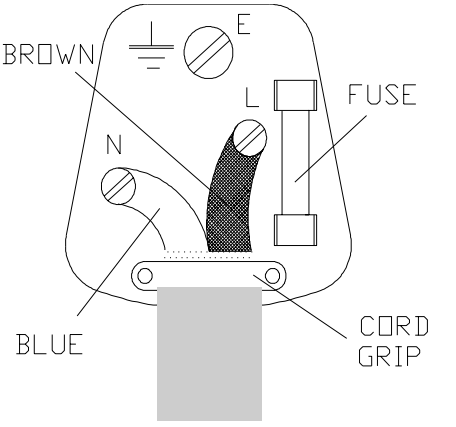
As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

No connection is to be made to the earth terminal of the plug.

If a 13 Amp (BS 1363) Plug is used a 5 Amp Fuse must be fitted, or if any other type of Plug is used a 5 Amp Fuse must be fitted, either in the Plug of Adaptor, or on the Distribution Board.



CAUTION

TO PREVENT ELECTRIC SHOCK DISCONNECT FROM THE MAINS BEFORE REMOVING COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

SAFETY PRECAUTION

THIS EQUIPMENT MUST BE DISCONNECTED FROM THE MAINS WHEN NOT IN USE. DO NOT ALLOW THIS UNIT TO BE EXPOSED TO RAIN OR MOISTURE.

Important Information

Please take note

EXCLUSION CLAUSE

JVC shall under no circumstances be liable for loss and/or damage to the product caused by:

- fire;
- earthquake;
- accidental damage;
- intentional misuse of the product;
- use of the product in improper conditions;
- loss and/or damage caused to the product whilst in the possession of a third party;
- any damage or loss caused as a result of the owner' s failure and/or neglect to follow the instructions set out in the owner's manual;
- any loss or damage caused directly as a result of misuse or malfunction of the product when used simultaneously with associated equipment;

Furthermore, under no circumstances shall JVC be liable for any consequential loss and/or damage including but not limited to the following, loss of profit, interruption of business, the loss of recorded data whether caused during normal operation or misuse of the product.

WARNING! NEVER LEAVE A STATIONARY IMAGE ON THE SCREEN

If stationary images generated by TELETEXT, CHANNEL IDENTIFICATION LOGOS, COMPUTER DISPLAYS, VIDEO GAMES, ON SCREEN MENUS, etc. are left on the TV screen for any length of time, they could become permanently ingrained.

If you use your television to display completely still images, or moving pictures which have a permanent still image superimposed e.g. broadcast network logos, it is always advisable to reduce BOTH the brightness and contrast settings.

Care and disposal

Cleaning the screen and cabinet...

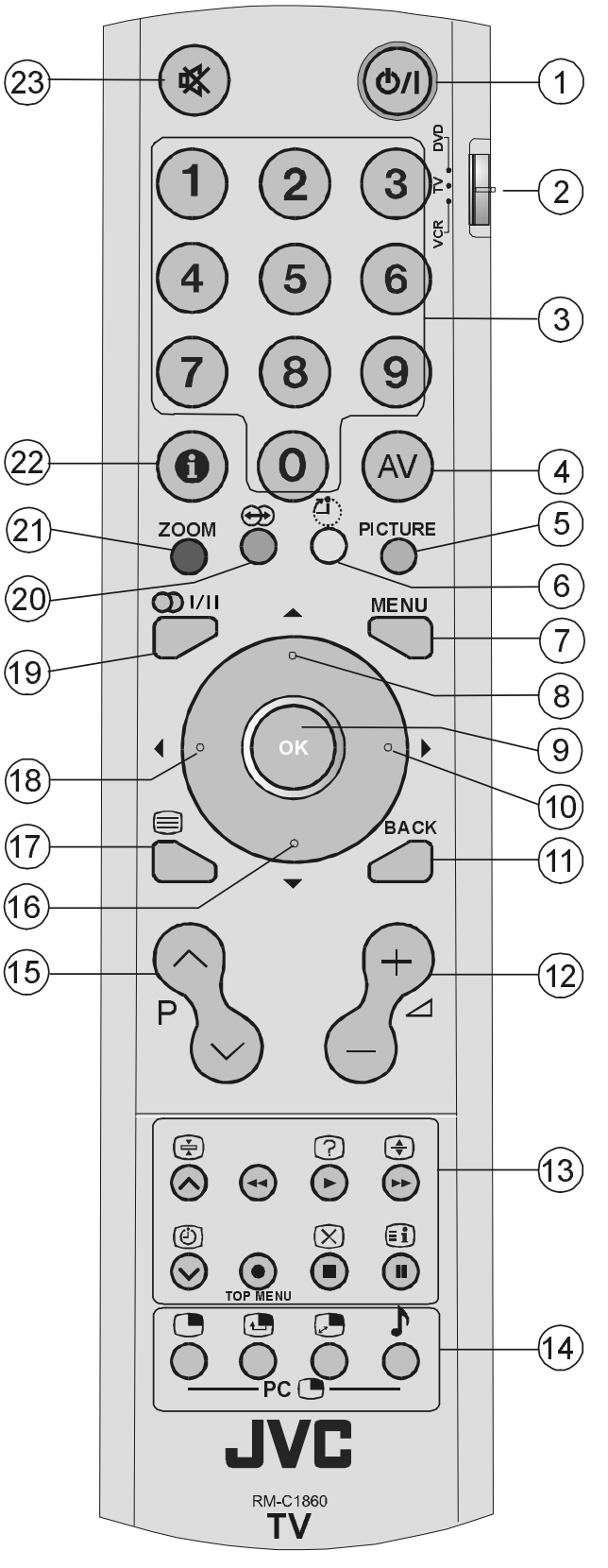
Turn off the power, clean the screen and cabinet with a soft, dry cloth. We recommend that you do not use any proprietary polishes or solvents on the screen or cabinet as this may cause damage.

Disposal...

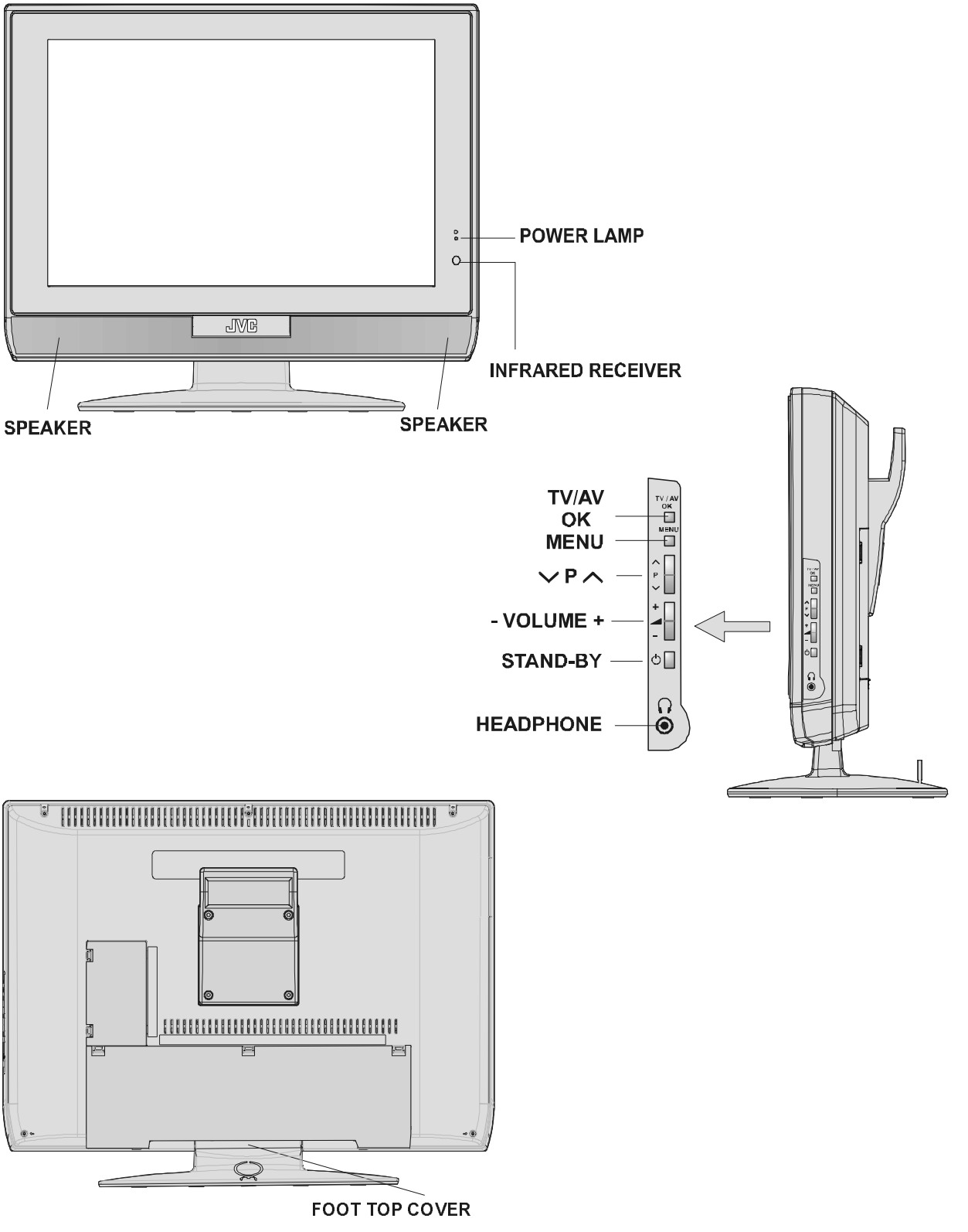
When the set reaches the end of its useful life please dispose of it in accordance with Local Government Regulations or at a recycling centre.

Remote Control Buttons

① ⏻ / I = (Stand By) button
② TV / VCR / DVD Switch
③ Number buttons
④ **AV** button (TV, EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S or PC)
⑤ **BLUE / PICTURE** Mode button
⑥ **YELLOW** / Sleep Timer button
⑦ **MENU** button
⑧ ▲ = Cursor Up button
⑨ OK button
⑩ ▶ = Cursor Right button
⑪ **BACK** button
⑫ = Volume + / - buttons
⑬ Teletext / VCR / DVD Control buttons
⑭ PC Control Buttons
⑮ P∧/∨ buttons
⑯ ▼ = Cursor Down button
⑰ = Teletext Button
⑱ ◀= Cursor Left button
⑲ I/II = Stereo / Bilingual button
⑳ **GREEN** / Hyper Sound On/Off button
㉑ **RED / ZOOM** Mode button
㉒ = Information Button / T-V Link in Program Menu
㉓ = Mute button



Control Panel Buttons



With certain combinations of connectors and leads the back cover may not be easily fitted. If the cover is left off, this in no way infringes safety requirements.

Using the stand

This TV comes with a Table Top Stand already attached.

This stand can be used to adjust the direction of the TV screen 5° up, 10° down, and 20° to the left or right.

Tilt the TV up and down:

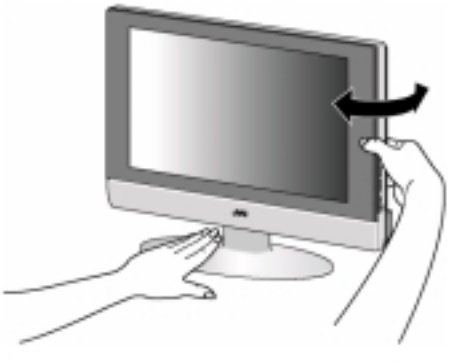
While holding the bottom of the stand with one hand, use your other hand to hold the middle of the top of the TV and slowly tilt the TV up and down.

- As a safety measure, the stand is constructed so that it requires a certain amount of force to tilt the TV.



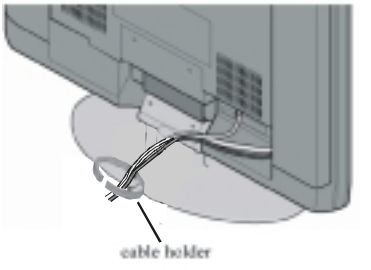
Rotate the TV to the left and right:

While holding the bottom of the stand with one hand, use your other hand to hold the odge of the panel and slowly adjust the direction of the TV screen.



Cable holder

A cable holder which is used to keep the connection cables tidy is attached to the back of the stand.

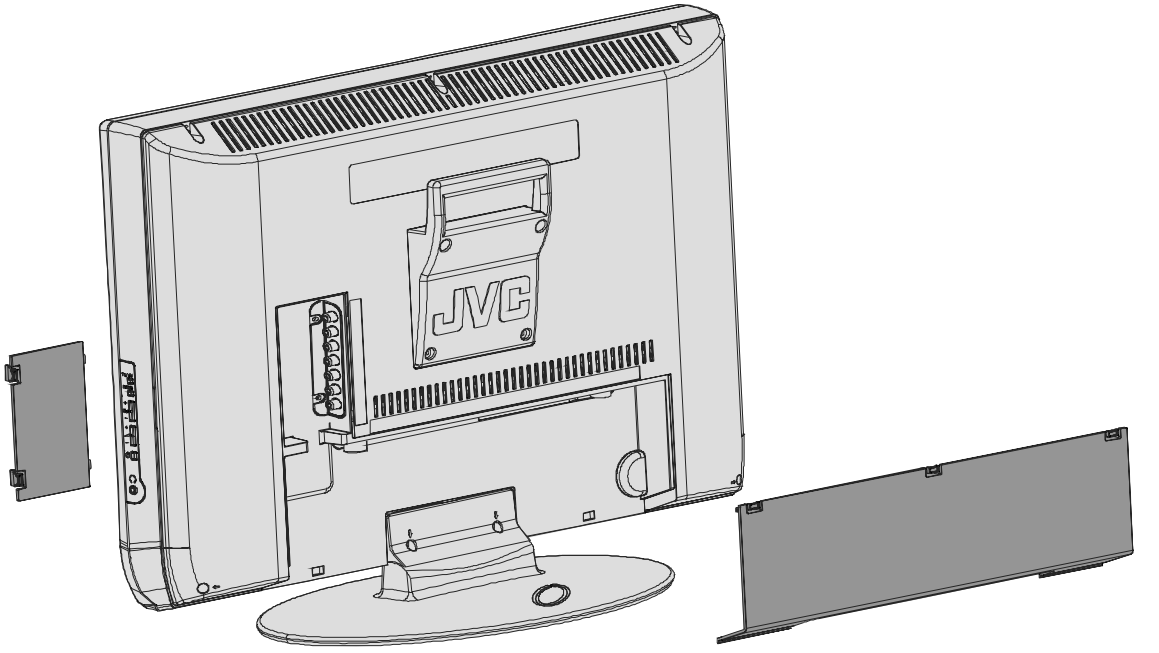


Remove the terminal Cover

There are connection terminals behind the covers of the rear of the TV. Remove the cover before connecting an antenna, DVD or VCR.

Remove the covers by removing the hooks. When replacing the covers, place the side or bottom of the covers against the TV and insert the hooks.

- Leave the covers off if they do not fit properly. DO NOT force to replace the covers. Doing so may cause damages of the connection cables and the covers.
- Leave these covers off when mounting the TV on a wall.



- 100 mm mount based on VESA regulation is equipped.
- The handle and the stand can be left by loosing the screws with a screwdriver when mounting the TV on a wall.
- Spread a soft cloth on a flat table and then place the TV on the cloth with the screen facing downwards when you leave the handle and the stand.

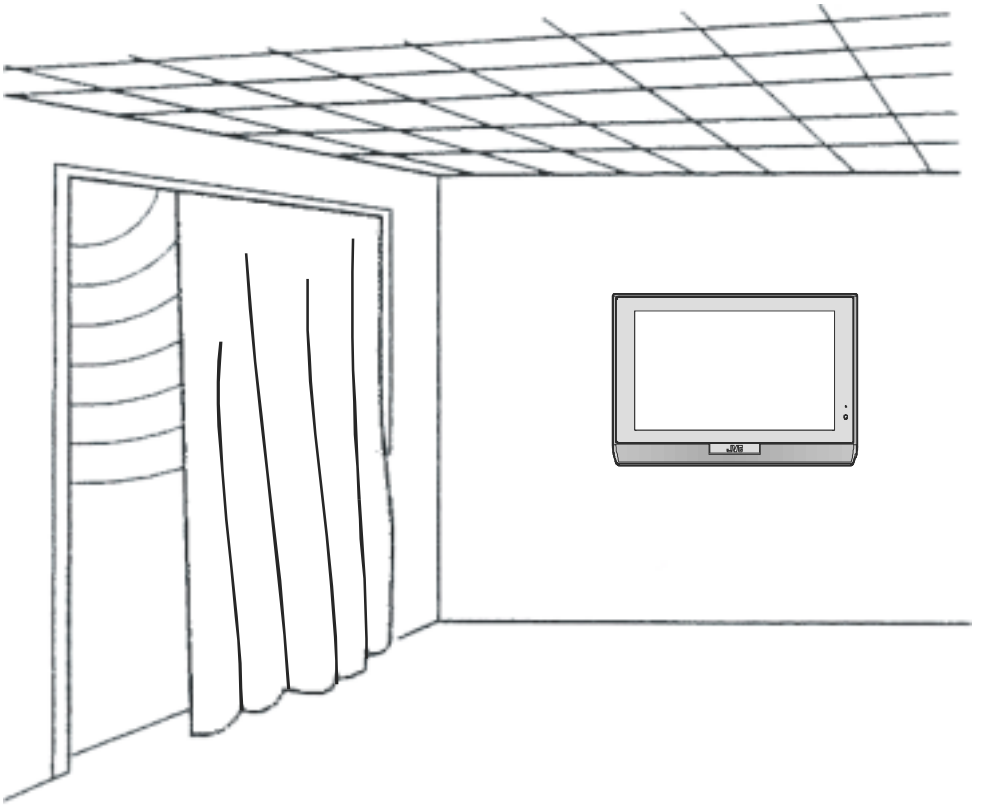
Where to install

Locate the TV away from direct sunlight and strong lights, soft, indirect lighting is recommended for comfortable viewing. Place on a sturdy platform, the mounting surface should be flat and steady, it should then be secured to the wall with a sturdy tie using the hook on the back of the TV, this will prevent it from falling over. Use curtains or blinds to prevent direct sunlight falling on the screen.

A floor and table top stand are available for this television, or and angled bracket which enables the TV to be wall-mounted.

The LCD display panels are manufactured using an extremely high level of precision technology, however sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

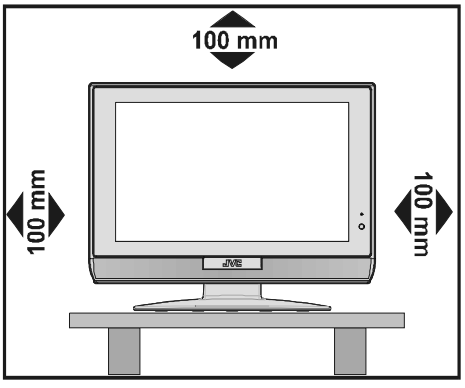
Make sure the TV is located in a position where it cannot be pushed or hit by objects, as pressure will break or damage the screen.



Preparation

Install Display on solid horizontal surface such as a table or desk.

For ventilation, leave a space of at least 10 cm free all around the set. To prevent any fault and unsafe situations, please do not place any objects on top of the set.



Features

- It is a remote controlled colour television and PC monitor.
- 100 programmes from VHF, UHF bands or cable channels can be preset.
- It can tune cable channels.
- Controlling the TV is very easy by its menu driven system.
- It has 2 pieces of Euroconnector socket for external devices (such as video, video games, audio set, etc.)
- To use as a PC monitor, 15 Pin Mini D-Sub connector for computer.
- Optional stereo sound systems (German or German+Nicam) are available.
- Multilanguage OSD.
- Teletext (Fastext, 7 pages).
- It is possible to connect headphone.
- A.P.S. (Automatic programming system)
- All programmes can be named.
- Forward or backward automatic tuning.
- Sleep timer.
- Child lock
- Auto, Full, Regular, Panoramic, 14:9 Zoom,16:9 Zoom,16:9 Zoom Subtitle modes.
- Automatic sound mute when no transmission.
- When no valid signal is detected, after 5 minutes the TV switches itself automatically to stand-by mode.
- NTSC Playback.
- Universal power supply range is a standard feature on this model.
- TV Picture in PC (if PC input available).
- PLL (Channel Search)
- PC input (Support Up to 1360 x 768)

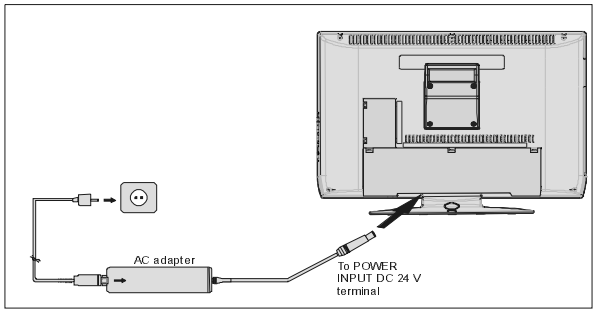
Panel Features

- High resolution, 23”-inch TFT LCD display.
- High contrast ratio (800:1 Typical)
- Brightness: 500 cd/$m^{2.}$
- High-speed response time < 25 msec.
- Wide viewing angle (typical) 170° (horizontal) and 170” (vertical).
- 8-bit colour depth, display 16.7 M colours.

Before Switching on your TV

Power connection

Only use the adaptor supplied with this product.

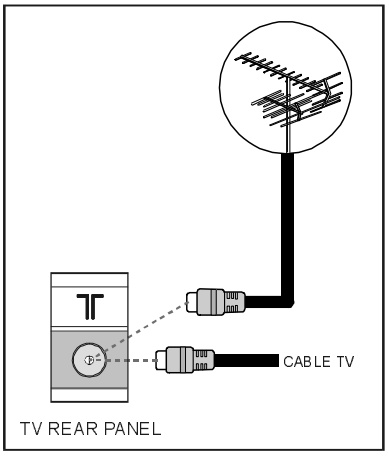


IMPORTANT: The TV set is designed to operate on **24 V DC. For this, an adaptor is used which gives 24 V DC voltage. Connect this adaptor to a system that supplies 100 -240V AC, 50 Hz.**

- After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

Connections to the RF input socket

• Connect the aerial or cable TV plug to the RF input socket located at the back of the TV and connect the cable plug coming out from the TV out socket located at the devices (VCR, DVB etc.) to this socket as well.



How to connect other devices

IMPORTANT: Switch off the TV before connecting any external device.

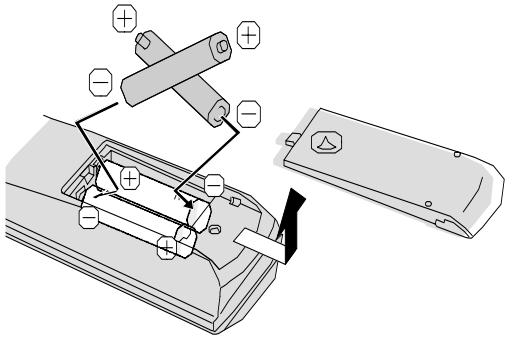
Sockets for external connections are at the back of the TV. For connection of other devices via Euroconnector refer to the manuals of the related devices.

Inserting batteries in the remote control handset

• Remove the battery cover located on the back of the handset by gently pulling upwards from the indicated part.

• Insert two AA/R6 dry cell or equivalent type of batteries inside.

• Replace the battery cover.



NOTE: *Remove the batteries from remote control handset when it is not to be used for a long period.Otherwise it can be damaged due to any leakage of battery.*

Old batteries must be disposed in a designated area. If performance of the remote control reduces, replace the batteries with the correct type. Do not combine a used, old battery or a new one or mixed battery types. Remove dead batteries immediately to prevent acid from leaking into the battery compartment.

Switching the TV ON/OFF

To switch the TV on

Your TV will switch on in two steps:

1- Connect the power supply cord to the system. Then the TV switches itself to stand-by mode and the power lamp becomes red located on the front of the TV.

2- To switch on the TV from stand-by mode either:

Press the "⏻" button on the remote control or on the right side of the TV

or.

press a digit button on the remote control so that a programme number is selected,

or,

Press **"P/Ch"** button on the right side of the TV or press **"P∨"** or **"P∧"** buttons on the remote control, so that last switched off programme is selected.

By either ways the TV will switch on and the power lamp will become green.

To switch the TV off

• Press the "⏻" button on the remote control or on the right side of the TV, so the TV will switch to stand-by mode and the power lamp will become red.

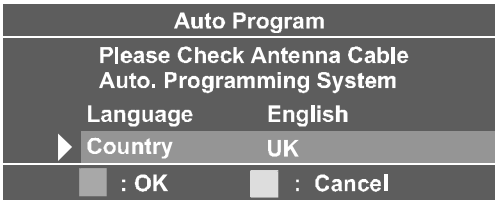
NOTE: To switch the TV off completely remove the mains plug from the socket.

Operating the TV

You can operate your TV both using the remote control handset and onset buttons.

First A.P.S. (Automatic Programming System)

APS, searches and sorts all channels and stores them automatically on your TV, according to the transmission of programme systems in your area.



To cancel APS before starting, press BLUE button.

First of all choose the "**Language**" which the menus of the TV will appear. As soon as you change the language, the menu items will be displayed in the selected language. . By pressing the " ▲ " or " ▼ " button, come to the "**Country**" item and select the country. This will effect the sort process in APS. Press red button to start A.P.S.

After APS is finalized, a programme list will appear on the screen. In the programme list you will see the programme numbers and names assigned to the programmes.

If you press the BLUE button at any time while the A.P.S. is running, the A.P.S. will be ended.

If you do not accept the locations and / or the programme names of programmes, you can change them in Program menu. For details see **Program Menu** on page 19.

If you do not have a T-V Link compatible VCR, press BLUE button to exit the menu.

If you have aT-V Link compatible VCR connected to the EXT-2 terminal, press " ℹ " button to display T-V Link menu. Then follow the operating procedure "**Downloading data to VCR**" in the following T-V Link section.

T-V Link

When a T-V Link compatible VCR connected to the EXT-2 terminal on the TV, it is easier to set up the VCR and to view videos. T-V Link uses the following features:

To use T-V Link functions

A "**T-V Link compatible VCR**" means a JVC video cassette recorder with the T-V Link logo, or with one of the following logos. For details see your VCR instruction manual.

"**Q-LINK**" (A trademark of Panasonic Corporation)

"**Data Logic**" (A trademark of Metz Corporation)

"**Easy Link**" (A trademark of Phillips Corporation)

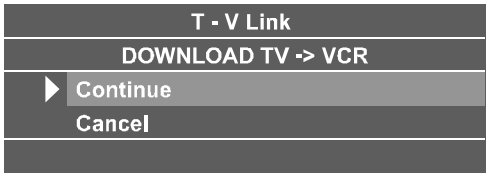
"**Megalogic**" (A trademark of Grundig Corporation)

"**SMARTLINK**" (A trademark of Sony Corporation)

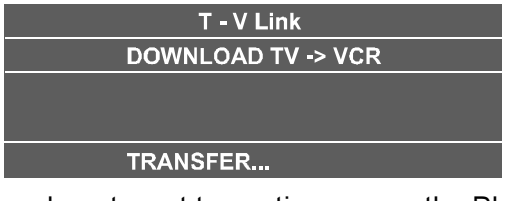
Downloading data to VCR:

The VCR will automatically download the registered data on the TV channels from the TV. This means you do not need to set up the programme channels on your VCR manually.

The "**T-V Link**" menu will be displayed when you press the " ℹ " button while **Program** menu is displayed.



Press "►" or "**OK**" button to start downloading data to VCR. "**TRANSFER**" is displayed in the menu



If you do not want to continue press the BLUE button to exit the menu.

If "**FEATURE NOT AVAILABLE**" is displayed,

download was not performed correctly. Before trying to download again, check that:

• The VCR power is turned on.

• The VCR is T-V Link compatible.

• The VCR is connected to the EXT-2.

• The scart cable is fully wired.

Direct REC:

You can easily record to VCR the images that you are watching on the TV. For details, read the manual for your VCR. Use your VCR controls you can not carry out Direct REC using your TV control.

When the VCR is not ready (For example when there is no tape inserted), "**NO RECORDING**" is displayed. In the following situations, the VCR will stop recording if the Tv is turned off, if the TV channel or input is changed, or if the menu is displayed on the TV:

• When recording images from an external device connected to TV (For example camcorder).

• When recording a TV channel after it has been unscrambled on a decoder.

• When recording a TV channel by using the TV's output because the VCR's own tuner can not properly receive that channel.

TV autopower on/VCR image view:

When the VCR starts playing, the TV automatically turns on and images from EXT-2 appear on the screen.

This function does not happen if your TV's main power is turned off. Set your TV's main power to on (StandBy Mode).

Operating the TV

You can operate your TV both using the remote control handset and onset buttons.

Volume setting and programme selection can be made by using the buttons at the control panel on the right side of the TV.

Volume Setting

• Press "◢ **-**" button to decrease volume or "◢ **+**" button to increase volume, so a volume level scale (slider) will be displayed at the middle of the bottom on the screen.

Programme Selection

• Press "**P**∧" button to select the next programme or "**P**∨" button to select the previous programme.

Entering Main Menu

• Press "**MENU**" button to enter Main menu. In the Main menu select submenu using "**P**∨" or "**P**∧" button and enter the submenu using"◢ **-**" or "◢ **+**" button. To learn the usage of the menus, refer to the Menu System sections.

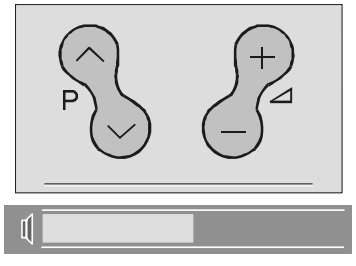
Operating with Remote Control

The remote control handset of your TV is designed to control all the functions of the model you selected. The functions will be described in accordance with the menu system of your TV.

Functions of the menu system are described in following sections.

Volume Setting

Press "◢ **+**" button to increase volume. Press "◢ **-**" button to decrease volume. A volume level scale (slider) will be displayed in the middle at the bottom of the screen.



Programme Selection (Previous or next programme)

- Press "**P**∨" button to select the previous programme.
- Press "**P**∧" button to select the next programme.

Programme Selection (direct access):

Press digit buttons on the remote control handset to select programmes between 0 and 9. TV will switch to the selected programme. To select programmes between 10 - 99, press the digit buttons consecutively which programme you want to select (eg. for programme 27, first press 2 and then 7). When it is late to press second digit button only the first digit programme will be displayed. The limit of the delay time is 3 seconds

.Example: PR6 → press 6, PR12 → press 1and 2 , PR123 → press 1,2 and 3.

Press directly the programme number to reselect single digit programmes.

Hint: *The channel list numbers are assigned by the broadcasters. Because not all channels are broadcast free-to-air and stored by the receiver, the channel list numbers do not run continuously. The fifteenth channel in the list, for example, may not be channel number 15 but channel number 17.*

Menu System

Your TV has been designed with a menu system to provide an easy manipulation of a multifunction system. The TV is controlled by choosing the commands, which are displayed on the screen.

MAIN MENU

Press the "**MENU**" button. The main menu will be displayed in the middle of the screen.



To select a sub-menu use "▲" or "▼" button, and press "◀" or "▶" button or directly press "**OK**" button.

In EXT-1, EXT-2 and EXT-4 modes, main menu appears the same as in TV mode but without Program sub-menu.

In EXT-3 mode, Main Menu appears as follows:



Menu does not disappear automatically if it is left on the screen.

Press "**MENU**" button again to remove menu.

Picture Menu

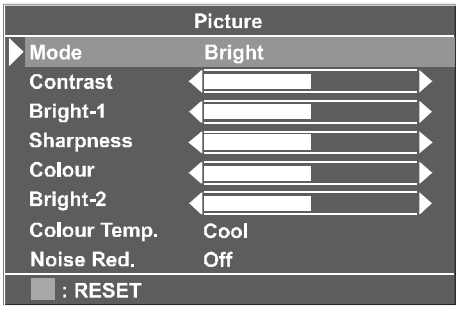
Press "**MENU**" button, now you are in main menu. In the Main menu, select "**Picture**" using "▲" or "▼" button, then enter the Picture menu pressing "◀" / "▶" or "**OK**" button.

Setting Mode

• As you enter the picture menu, Mode will be the first item.

• By pressing "◀" or "▶" button you may choose one of these options:

Soft, **Standard** and **Bright**.

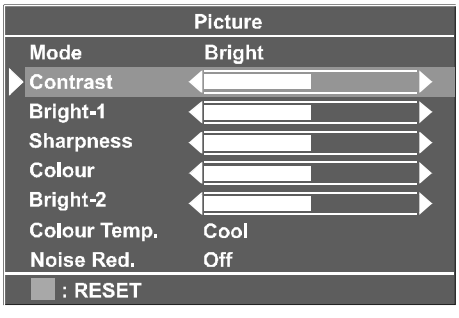


Setting Contrast

• Using "▲" or "▼" button select Contrast.

• Press "▶" button to increase contrast level.

• Press "◀" button to decrease contrast level.

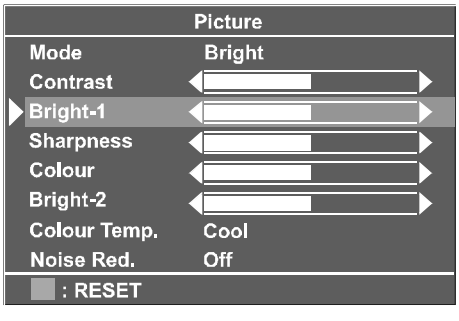


Setting Bright-1

• Using "▲" or "▼" button select Bright-1.

• Press "▶" button to increase brightness.

• Press "◀" button to decrease brightness.

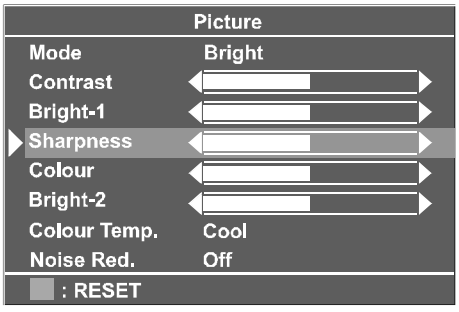


Setting Sharpness

• Using "▲" or "▼" button select Sharpness.

• Press "▶" button to increase sharpness level.

• Press "◀" button to decrease sharpness level.

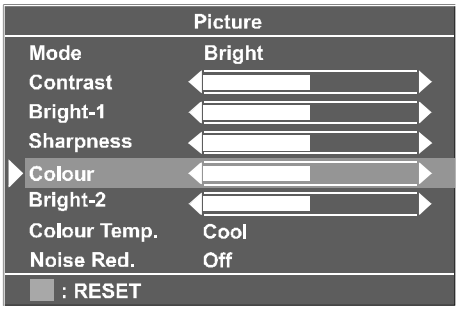


Setting Colour

• Using "▲" or "▼" button select Colour.

• Press "▶" button to increase colour level.

• Press "◀" button to decrease colour level.

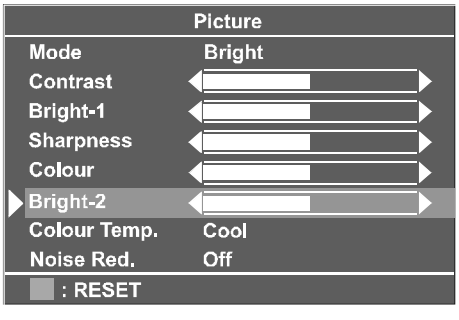


Setting Bright-2

Using"▲" or "▼" button select Bright-2.

• Press "▶" button to increase the back light.

• Press "◀" button to decrease the back light.



Setting Colour Temp.

• Using "▲" or "▼" button select Colour Temp.

• Press "◀" or "▶" button to select "**Warm**", "**Cool**" or "**Normal**".

Setting Noise Reduction

• Using " ▲ " or " ▼ " button select Noise Reduction.

• Press " ◀ " or " ▶ " button to select Noise Reduction level "**Off**" or "**Minimum**" or "**Medium**" or "**Maximum**

Note 1:

At low signal level, the changings on the Noise Reduction function are not effective when there is menu on the screen. If the menu is removed, the effect of this function is seen. At normal broadcasting, Noise Reduction changings are effective at once.

Note 2:

At moving pictures, while Noise Reduction is at maximum level, some picture distortions may occur. If Noise Reduction is set to medium or minimum, the picture will improve.

Setting Hue

During Playback NTSC system, this will appear in AV mode only when NTSC video source is applied. Otherwise, HUE option is invisible in Picture menu in TV mode :

• Using " ▲ " or " ▼ " button select Hue.

• Press " ▶ " button to increase hue level.

• Press " ◀ " button to decrease hue level.

Center value is indicated with one arrow.

Reset

Press BLUE button to reset the picture modes to factory default settings.

To Store the Settings

In the Picture Menu, all settings are stored automatically.

Sound Menu

To change sound settings

As you enter the main menu, sound will be the second item. In the main menu, select **Sound** using " ▲ " or " ▼ " button, then enter the sound menu pressing " ◀ " / " ▶ " or **"OK"** button.

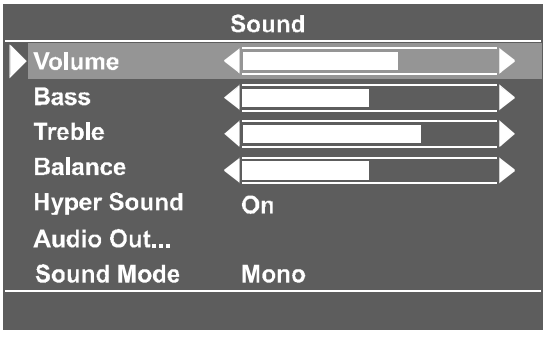
Setting Volume:

As you enter the sound menu, Volume will be the first selected option.

• Press " ▶ " button to increase volume.

• Press " ◀ " button to decrease volume.

Or you can directly change the volume settings using " ◢ **+**" (to increase) or "**-** ◢" (to decrease) button.



Setting Bass Level

• Using " ▲ " or " ▼ " button select Bass Level.

• Press " ▶ " button to increase bass level.

• Press " ◀ " button to decrease bass level.

Setting Treble Level

• Using " ▲ " or " ▼ " button select Treble

• Press " ▶ " button to increase treble level.

• Press " ◀ " button to decrease treble level

Setting Balance

It allows adjusting the distribution between the left and right speakers.

• Using " ▲ " or " ▼ " button select Balance.

• Press " ▶ " button to change balance rightward.

• Press " ◀ " button to change balance leftward.

Hyper Sound

• Using " ▲ " or " ▼ " button select Hyper Sound

• Pressing " ◀ " or " ▶ " button will turn on or off this feature.

Pseudo/spatial effect can be turned on or off via the Hyper Sound item in the Sound menu or by remote control. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels. Hyper Sound selection will be displayed on the

screen when the TV Status button is pressed or programme is changed.

To Change Audio Out Settings

Audio Out is a sub-menu of Sound menu.

Use this settings to adjust volume for audio out terminal which is located at the right side of the TV.

- Using " ▲ " or " ▼ " button select Audio Out.
- Press " ◀ " or " ▶ " button or directly press "**OK**" button on Audio Out, to enter the Audio Out menu.



Audio Out Volume

- As you enter the Audio Out sound menu, Volume will be the only option.
- Press " ▶ " button to increase volume.
- Press " ◀ " button to decrease volume.

Selecting Sound Mode

- Using " ▲ " or " ▼ " button select Sound Mode.
- Press " ◀ " or " ▶ " button to change Sound Mode.

You can choose **Mono**, **Stereo** or **Dual (I-II)** mode, only if the selected channel supports that Sound mode.

You can also change sound mode directly pressing "**I-II**" button on your remote control.

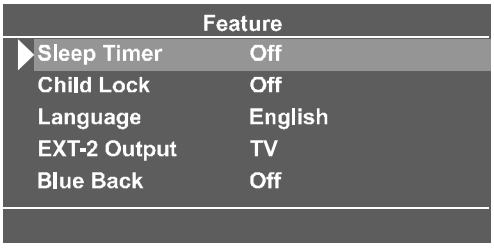
In case of bilingual broadcast (Dual Sound), you can select original or dubbed language using mode option.So when somebody listens to the original language from the loudspeakers, somebody else can listen to the dubbed language from headphone.

To Store The Settings

In the Sound Menu, all settings are stored automatically.

Feature Menu

Press "**MENU**" button, now you are in mainmenu. In the main menu, select **Feature** using " ▲ " or " ▼ " button. Then enter the Feature menu pressing " ◀ " / " ▶ " or "**OK**" button.



Sleep Timer

The Sleep Timer is used to turn the TV off after a defined period of time after selecting this item. The timer can be programmed between Off and 120 minutes in steps of 10 minutes. (Off, 010, 020, 030, 040, ... , 120)

If sleep timer is activated, at the end of the selected the time, the TV goes automatically to stand-by mode.

Child Lock

You can use this feature to prevent children turning on/off TV or changing programmes or adjustments etc. without remote control.

- Using " ▲ " or " ▼ " button select Child Lock.
- Press " ◀ " / " ▶ " button to select Child Lock **On** or **Off**.

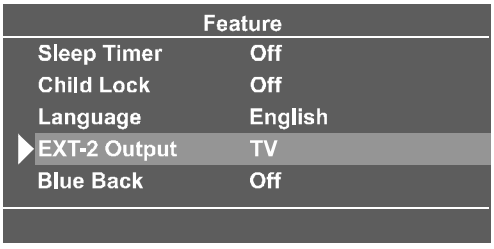
The **Child Lock** feature can be set **On** or **Off** by " ◀ " / " ▶ " button. When **Off** is selected, there will be no difference in the operation of your TV. When **On** is selected, the TV can only be controlled by the remote control handset. In this case the control panel buttons except "⏻" button on the right side of the TV will not work.

Selecting Menu Language

- Using " ▲ " or " ▼ " button select Language.
- Press " ◀ " or " ▶ " button to select menu language.

EXT-2 Output

From EXT-2 Output; **TV**, **EXT-1** or **EXT-4** can be given. These modes can be chosen by pressing " ◀ " or " ▶ " button on "**EXT-2 Output**".



Blue Back (During No Signal)

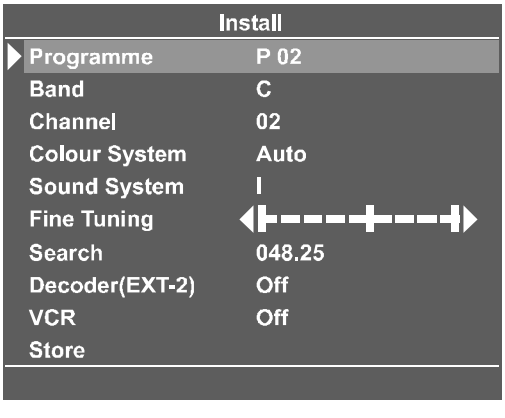
The Blue Back Feature can be set by " ▲" or "▼" button to either On or Off.

To Store Settings

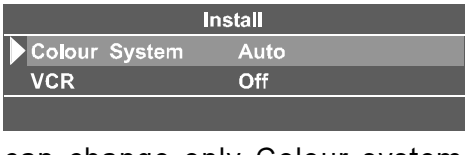
In Feature menu all settings are stored automatically.

Install Menu

Press "**MENU**" button, now you are in main menu. In the main menu, select "**Install**" using ▲" or "▼" button. Then enter the Install menu pressing"◀" / "▶" or "**OK**" button.



In EXT mode, Install menu appears like this:



You can change only Colour system and VCR.

Selecting Programme

- Using " ▲" or "▼" button select Programme.
- To select programme number, you can use "◀" / "▶" button or Digit Buttons

Selecting Band

Band, can be chosen either,

- "C" or "S" by "◀" or "▶" button.

Selecting Channel

Channel can be changed by "◀" or "▶" button or by Digit Buttons.

Selecting Colour System

Using "◀" or "▶" button on **Colour System**, you can change the colour system to **PAL, SECAM** or **Auto**.

Note: In EXT mode, you can choose NTSC 3.58 and NTSC 4.43 as well.

Selecting Sound System

Using "◀" or "▶" button on **Sound System**, you can change the standard to **BG, DK, I, L, Lp**.

Selecting Fine Tuning

You can use the Fine Tuning process for fine adjustment (after coarse adjustment), if you are not happy about the image on the screen.

Use "◀" or "▶" button on **Fine Tuning** item, until getting the best image on the screen.

Selecting Search

To start the search process, press "▶" button for forward search or "◀" button for backward search. If a signal is found or reaches to end of the band after searching, press "◀" or "▶" buttons to continue search process. To stop the search process when you want, press "◀" or "▶" buttons at any time.

Decoder (EXT-2)

You can use this mode to connect any decoder to your TV.

- Press the"◀" or "▶" buttons to set it "**On**" or "**Off**".

When you select Decoder(EXT-2) "**On**", EXT-2 output will be chosen as TV mode only and any scrambled channels will be unscrambled through decoder connected your TV via EXT-2 output.

Setting VCR (Video Cassette Recorder) Mode

- This item can be seen in **TV, EXT-1**, **EXT-2**, **EXT-3** and **EXT-4** modes.

• If you want to watch a **VCR** source from one of these modes, then it will be better to set **VCR** mode "**On**". For this, while the cursor is on this item press the"◀" or "▶" buttons to set it "**On**".

• If you want to watch a **DVD** , then you must set this item "**Off**"; because **DVD** is not a source like a **VCR** and to see the picture better, you must set the **VCR** mode "**Off**".

To Store Settings

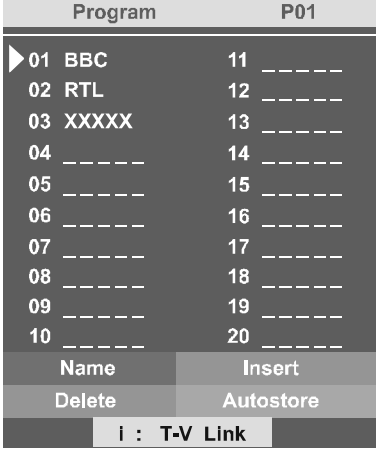
• Press "◀" / "▶" or "**OK**" button on **Store** option to store Install menu settings.

• After stored, T-V Link menu will appear. If you do not need to do T-V Link, press BLUE button to exit the menu.

Program Menu

Press "**MENU**" button, now you are in main menu. In the main menu, select "**Program**" using "▲" or "▼" button. Then enter the Programme menu, press "◀" / "▶" or "**OK**" button.

Note: There is no Program menu in any EXT modes.



Program Menu is used to delete a channel, to change the programme number of a channel, to give a channel name to a channel, and to start the A.P.S (Autostore) function.

To choose a channel in the PROGRAM menu

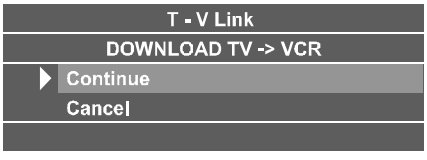
Press "▲" / "▼" / "◀" / "▶" button. The programme number that you choose is highlighted in the Program.

Caution:

Using "Delete" or "Insert" function rewrite the current channel list in the Program menu. Therefore, the programme numbers of some of channels will change.

When you complete the settings of Program menu:

If you have a T-V Link compatible VCR, press "ⓘ" button to display the T-V Link menu. then follow the operating procedure "**Downloading the data to VCR**"



If you do not have a T-V Link compatible VCR, press BLUE button to exit the menu.

To give a channel name (Name):

1. Choose the channel you want to give a channel name.
2. Press the RED button to enter the Namemode.
3. Press "◀" or "▶" button to choose the position,and press "▲" or "▼" button to choose each character of channel name.
4. Press the RED button to store the channel name.

• To cancel the Name mode, press the BLUE button.

To delete a channel (Delete):

1. Choose the channel you want to delete.
2. Press the YELLOW button to enter the Delete mode.
3. Press the YELLOW button to delete it.

• To cancel the Delete mode, press the BLUE button.

To change the programme number of a channel (Insert)

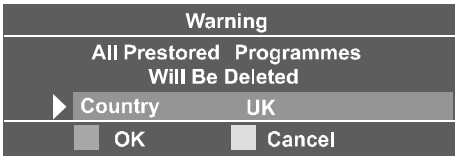
1. Choose the channel you want to change the programme number.
2. Press the GREEN button to enter the Insert mode.
3. Press "▲" / "▼" / "◀" / "▶" button to choose new programme number.

4. Press the GREEN button to insert the channel to the chosen programme number.

Autostore:

To enter Autostore menu, press the BLUE button. To learn the features of this function see "**Autostore**" below.

Autostore, searches and stores all channels automatically on your TV, according to the transmission of programme systems in your area.



First of all choose the "**Country**" by using "◀" or "▶" button.

After Autostore is finalized, a programme list will appear on the screen. In the program list you will see the programme numbers and names assigned to the programmes.

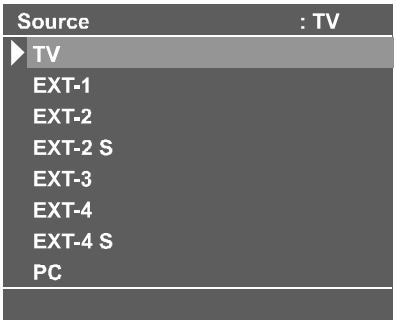
If you do not accept the locations and/or the programme names of programmes, you can change them in Programme menu.

Source Menu

You can switch your TV to EXT modes by pressing directly to "**AV**" button or by selecting in source menu from the main menu.

While in EXT mode, you can also switch your TV to TV or other EXT modes by selecting in source menu from the main menu.

In main menu, firstly use "▲" or "▼" button then use "◀" / "▶" or "**OK**" button to enter Source menu. In source menu, move the cursor by "▲" or "▼" button and then press "**OK**" button or "◀" / "▶" buttons when the cursor is on the required item. The selected mode comes automatically on the screen.



Other Features

TV Status

Programme Number, **Programme Name** (or **EXT**), (they are displayed on the upper left of the screen). The **sound indicator** is displayed with them too. They are displayed after programme change during 3 seconds.

Sound Indicator

The alternatives of the indicator are Mono, Stereo, Dual I and Dual II. This indicator is displayed under the programme number indicator on the screen. "**I-II**" button is used to select Mono or Stereo, or Dual I or Dual II.

Mono

In Mono broadcast or in forced-mono (for stereo broadcast).

Stereo

In Stereo broadcast.

Dual I

If dual broadcast detected. Dual I is selected in default and also can be selected after Dual II by Remote Control.

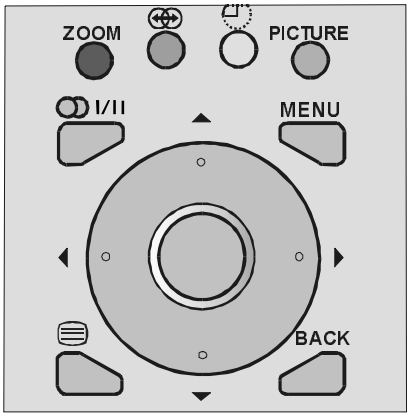
Dual II

If Dual II selected by Remote Control.

Hyper Sound

By selecting Hyper Sound in sound menu or by pressing the "⟲" button on your remote control, Pseudo/Spatial effect can be turned on or off. In Mono transmission the left and right channels will be added at left channel and dummy stereo effect will introduced to end-user.

In stereo transmission it yields a phase difference between left and right channels. Hyper Sound selection will be displayed on the screen when the TV Status button is pressed or programme is changed.



Picture Mode

Picture mode OSD is displayed when BLUE button is pressed. Picture mode can be changed to standard, soft, and bright.

Sleep Timer

Sleep Timer mode OSD is displayed when YELLOW button is pressed.

The Sleep Timer is used to turn the TV off after a defined period of time after selecting this item. The timer can be programmed between Off and 120 minutes in steps of 10 minutes. (Off, 010, 020, 030, 040, ... , 120)

If sleep timer is activated, at the end of the selected the time, the TV goes automatically to stand-by mode.

Mute Indicator

It is placed in the upper middle of the screen when enabled, and it stays there until it is disabled.



To cancel mute, there are two alternatives; the first one is by pressing the "🔇" button, this volume is set to the preceding value, and the second one is increasing the volume level. By decreasing the volume level in mute state, mute will not be ignored, only the volume level will decrease.

No-Signal Detection (TV mode)

If no valid signal detected, it takes 5 minutes to switch to the Stand-By mode unless any signal detected or any Remote Control command is accessed.

After a Remote Control command (if No-Signal Timer is active) the timer stops and if no signal detected again the timer is initialized to 5 minutes and starts 3 seconds later again to count down.

It is not valid in EXT modes.

No-Signal and Out Of Range Detection (PC mode)

In PC Mode,as no menu is displayed,in case that there is no PC input to the TV,it is displayed an OSD message:

No input signal detected

then the power lamp turns to amber and PC will be in PC standby mode. Press "**AV**" button, digit buttons or "**P∨**" / "**P∧**" buttonsto exit standby mode.

In PC Mode,as no menu is displayed,in case that there is no PC input to the TV, but the resolution and the vertical frequency is not supported by the concept, it is displayed an OSD message:

Signal out of range

Volume Bar

It is displayed in the lower middle of the screen. When a volume command is received (pressing **"◢ +"** or **"◢ -"** by Remote Control or Control panel at the top of the TV) and no menu is active, it stays on the screen for 3 seconds, after the last volume command or until another command is received in between.



EXT Modes

By pressing the "**AV**" button you can switch your TV to EXT modes (except being in Teletext). Pressing this button will consecutively switch the TV in one of the optional EXT modes: **EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S** and **PC**.

In order to quit the EXT mode press any digit buttons or **"P∨"** or **"P∧"**

Zoom Modes

Zoom mode can be changed by pressing Red button. You can change the screen size according to the picture aspect ratio. Select the optimum one from the following **ZOOM** modes.

AUTO:

When a **WSS (Wide Screen Signalling)** signal, which shows the aspect ratio of the picture, is included in the broadcast signal or the signal from an external device, the TV automatically changes the **ZOOM** mode to **16:9 ZOOM** mode **PANORAMIC** or **FULL** mode according to the **WSS** signal.

- When the **AUTO** mode does not function correctly due to poor **WSS** signal quality or when you want to change the **ZOOM** mode, change to another **ZOOM** mode manually.

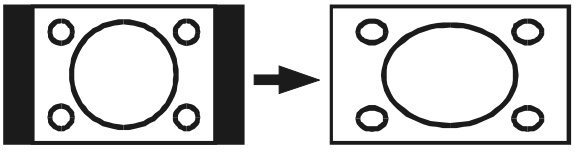
Using the different screen formats

Press the Red button to select the different modes: **AUTO,FULL, REGULAR, PANORAMIC, 14:9 ZOOM, 16:9 ZOOM, 16:9 ZOOM SUBTITLE** modes.

Note: *You can only choose REGULAR and FULL in PC mode*

FULL:

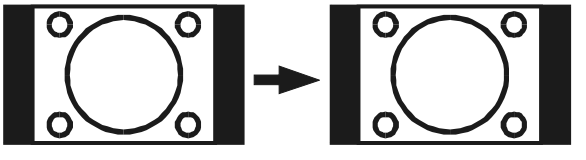
This uniformly stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the wide TV screen.



- For 16:9 aspect ratio pictures that have been squeezed into a normal picture (4:3 aspect ratio), use the **FULL** mode to restore the picture to its original shape.

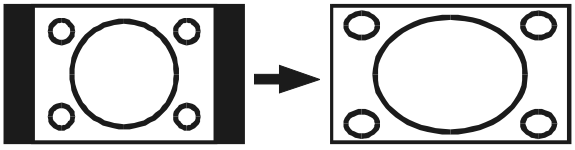
REGULAR:

Use to view a normal picture (4:3 aspect ratio) as this is its original shape.



PANORAMIC:

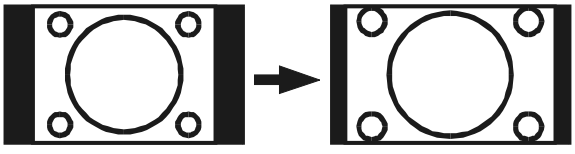
This stretches the left and right sides of a normal picture (4:3 aspect ratio) to fill the screen, without making the picture appear unnatural.



The top and bottom of the picture are slightly cut off.

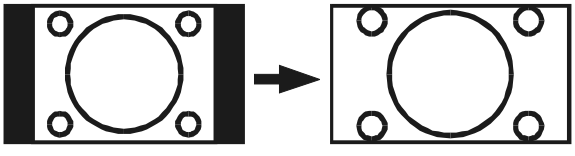
14:9 ZOOM:

This zooms up the wide picture (14:9 aspect ratio) to the upper and lower limits of the screen.



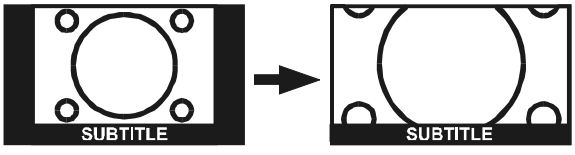
16:9 ZOOM:

This zooms up the wide picture (16:9 aspect ratio) to the full screen.



16:9 ZOOM SUBTITLE:

This zooms up the wide picture (16:9 aspect ratio) with subtitles to the full screen.

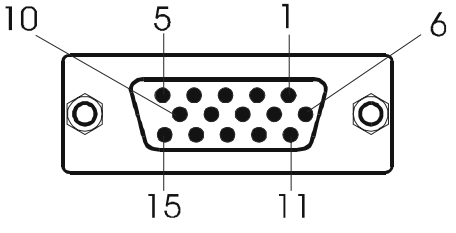


PC Mode

Installation

- Power off both Computer and Display before making any connections.
- Set your PC's resolution correctly before connecting to the TV. See the table in page 30 for supported modes.
- Use a D-SUB cable to connect the TV's PC input to the computer's RGB output terminal. If you want to listen to the sound from the computer, use an audio cable to connect the PC AUDIO IN to the computer's sound output terminal.

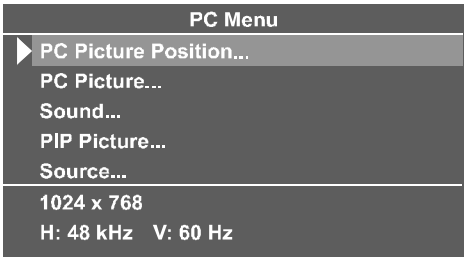
15 Pin Mini D-Sub Connector



- Tighten the screws of the Display cable until the connectors are fastened securely (finger-tighten only).

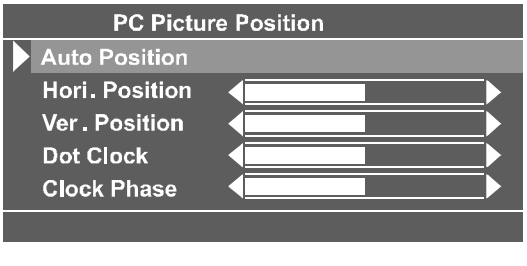
Main Menu in PC mode:

Enter the main menu by pressing the "**MENU**" button on the remote control.



PC Picture Position Menu:

In the Main menu, select "**PC Picture Position**" using "▲" or "▼" button, then enter the menu pressing "◀" / "▶" or "**OK**" buttons..



Auto Position

If you shift the picture horizontally or vertically to an unwanted position, use this item to put the picture into correct place automatically.

- Select **Auto position** item by using "▲" or "▼" buttons.
- Press "**OK**" button.
- Press "**MENU**" button or "**BACK**" button to store the value.

Warning: Auto position adjustment recommended to be done with the full screen image for the proper adjustment.

Horizontal Position

This item shifts the image horizontally to right hand side or left hand side of the screen.

- Select **Hori. Position** item by using "▲" or "▼" button.
- Use "◀" or "▶" button to adjust the value.
- Press "**MENU**" button or "**BACK**" button to store the value.

Vertical Position

This item shifts the image vertically towards the top or bottom of the screen.

- Select **Ver. Position** item by using "▲" or "▼" button.
- Use "◀" or "▶" button to adjust the value.
- Press "**MENU**" button or "**BACK**" button to store the value.

Dot Clock

Dot Clock adjustments correct interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.

- Use "◀" or "▶" button to adjust the value.

Clock Phase

Depending on the resolution and scan frequency that you input to the TV Set, you may see a muddy or noisy picture on the screen. In such a case you can use this item to get a clear picture by trial and error method.

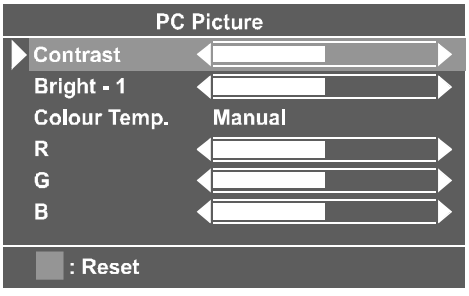
- Use "◀" or "▶" button to adjust the value.

PC Picture Menu

In the Main menu, select "**PC Picture**" using "▲" or "▼" button, then enter the PC Picture menu pressing "◀" / "▶" or "**OK**" buttons.

Contrast, **Bright-1** and **Colour Temp**. adjustments in this menu are identical to adjustments defined in TV picture menu.

R, G, and B adjust the TV image colour in PC mode. You can change the TV colour to your desired colour: R (Red), G (Green), B (Blue)



Sound Menu

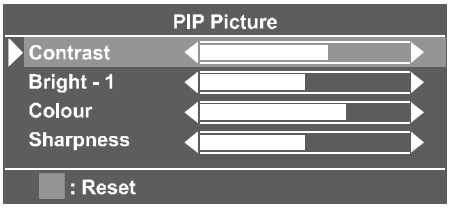
In the main menu select "**Sound**" using "▲" or "▼" button then enter the Sound menu pressing "◀" / "▶" or "**OK**" buttons.

The items in this menu are described at **Sound menu** starting **page 16**.

PIP Picture

In the Main menu, select "**PIP Picture**" using "▲" or "▼" button, then enter the PIP Picture menu pressing "◀" / "▶" or "**OK**" buttons.

This menu is displayed when PIP is displayed on the screen and otherwise "**PIP No Signal**" message will be displayed at the bottom of menu.



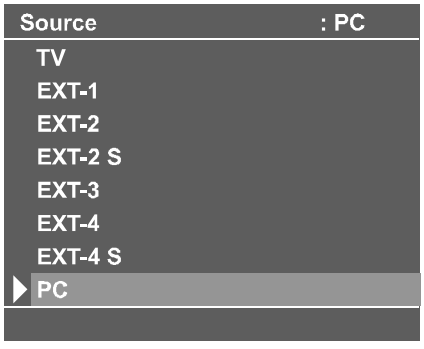
PIP picture is displayed on the screen with "" button. By pressing "**OK**" button, PIP window is selected. PIP position is changed by "" button. There are four different PIP positions. PIP size is changed by "" button. Two different PIP size are available.

Programme in the PIP window is increased / decreased by "P∨ / P∧", digit buttons or AV button. All EXT modes (Except EXT-3) are also available in PIP window. PIP window is removed from the screen by "" button.

The items in this menu are described at **Picture menu** starting **page 14**.

Source Menu

In the Main menu, select "**Source**" using "▲" or "▼" button, then enter the Source menu pressing "◀" / "▶" or "**OK**" buttons.



Select the available sources of **TV, EXT-1, EXT-2, EXT-2 S, EXT-3, EXT-4, EXT-4 S** or **PC** using "▲" or "▼" button and by pressing "◀" / "▶" or "**OK**" buttons.

Sound in PC mode

- Connect the PC's Audio output to the TV's **PC Audio In** socket with an audio cable.
- On your remote control,using "♪" button to select sound source from **TV, EXT-1, EXT-2, EXT-3, EXT-4** and **PC** options.
- When PIP is displayed on the screen, "♪" allows you to switch sound between PC and selected PIP source.

Teletext

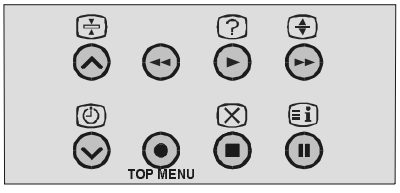
Teletext is an information system that displays text on your TV screen. Using the Teletext information system you can view a page of information on a subject that is available in the list of contents (index).

On screen display is not available in text mode.

Contrast, brightness or colour control is not available, but volume control is available in text mode.

To operate Teletext

- Select a TV station on which Teletext is being transmitted.
- Press (TELETEXT) "" button. Usually the list of contents (index) is displayed on the screen.



To select a page of Teletext

- Press the appropriate digit buttons for the required Teletext page number.

The selected page number is displayed at the top left corner of the screen. The Teletext page counter searches until the selected page number is located, so that the desired page is displayed on the screen.

- Press "P∧" button to move the Teletext screen forward one page at a time.
- Press "P∨" button to move the Teletext screen backward one page at a time.

To Select Index Page

- To select the page number of the index (generally page 100), press "" button.

Searching for a teletext page while watching TV

- In the Teletext mode pressing "" button will switch the screen to the TV mode. In the TV mode enter a page number using digit buttons. As you enter last digit of page number, "" sign will replace the page number and flash until the entered page number is found. Then the page number will replace "" sign again. Now you can display this teletext page pressing "" button.

To Select Double Height Text

- Press "" button for the top half of the information page to be displayed in double height text.
- Press "" button again for the bottom half of the information page to be displayed in double height text.
- Press "" button once more for the full page of normal height text.

To Reveal "concealed" Information

- Pressing "" button once will reveal answers on a quiz or games page.
- Pressing "" button again will conceal the revealed answers.

To Stop Automatic Page Change

The teletext page you have selected may contain more information than what is on the screen; the rest of the information will be displayed after a period of time.

- Press "" button to stop the automatic page change.
- Press "" button again to allow the next page to be displayed.

To Select a Subcode Page

Subcode pages are subsections of long Teletext pages that can only be displayed on the screen one section at a time.

- Select the required Teletext page.
- Press "" button.
- Select the required subcode page number by pressing four digit buttons (e.g. 0001).
- If the selected subcode page is not displayed in a short time, press "" button. TV programme will be displayed on the screen.
- Teletext page number will be displayed on the upper left corner of the screen when the selected page is found.

• Press "⊗" button to display the selected Teletext page.

To exit Teletext

• Press "☰" button. The screen will switch to TV mode.

Fastext and Toptext

Your TV supports the 7 page Teletext system. When the page number of any of the 7 pages in memory is entered, the system will not search for the requested page; instead it will display the page automatically.

• Press "P∧" button to move the Teletext screen forward one page at a time.

• Press "P∨" button to move the Teletext screen backward one page at a time.

For Fastext and Toptext

The subject-heading for the information may have a particular colour.

• Press an appropriate **RED**, **GREEN**, **YELLOW** or **BLUE** button in order to reach the relevant page quickly.

For TOPTEXT

If Toptext transmission is present, colour coded buttons will appear in status row.

If Toptext transmission is not present, status row will not appear.

In Toptext mode the "P∧" or "P∨" commands will request the next or previous page respectively. If Toptext transmission is not available, in case of operation of these commands, wraparound occurs. For example page 100 appears to be one greater than page 199.

Peripheral Equipment Connections

There is a wide range of audio and video equipment that can be connected to your TV.

Connection diagrams at the and of this section show you where the different equipment should be connected at the back side of the TV.

Via the Euroconnector

Your TV set has 2 Euroconnector sockets. If you want to connect peripherals (e.g. video, decoder, etc.) which have Euroconnectors, to your TV, use **SCART** input.

If an external device is connected via Euroconnector sockets TV is switched to AV mode automatically. In this case if both sockets are connected SCART has the precedence.

T-V Link compatible VCR

Be sure to connect the T-V Link compatible VCR to the **EXT.2** terminal. If not, the T-V Link function will not work properly.

• When connecting a T-V Link compatible VCR to the EXT.2 terminal, be sure to connect the decoder to the VCR. If not, the **T-V Link** function may not work properly. And then set the **Decoder(EXT-2)** function for the channel to **ON** to unscramble a scrambled channel.

RGB mode

If an equipment can output the **RGB** signals, connect it to the **EXT-1** or **EXT-2** terminal.

EXT-2 S Mode

If the equipment connected to your TV set supports S-Video (Y/C) output from Euroconnector, you can have a better picture quality by selecting **EXT-2 S** mode and connecting your equipment to the **EXT.2 (EXT-2 S)** terminal of TV. See your equipment's booklet to check if your equipment has such feature.

Via the RCA jacks

If you have an equipment (such as a Camcorder) which has the RCA jacks, connect it to the **EXT-4** terminal with the video and audio cables.

If you have a device which outputs component

signal, connect it to the EXT-3 terminal with a component video cable.

Via the ANT (aerial) socket

If your equipment does not have an Euroconnector or RCA jacks, connect it to the TV with an aerial cable. For details, see the manual provided with the equipment.

- To store the test signal that comes from the equipment, see "**Install Menu**" on page 18 and store it to the program number 0. You can watch images from that equipment to select the program number which you stored the test signal.

Decoder

Cable TV offers you a wide choice of programmes. Most of them are free, others are to be paid for by the viewer. This means that you will need to subscribe to the broadcasting organisation whose programmes you wish to receive. This organisation will supply you a corresponding decoder unit to allow the programmes to be unscrambled.

For further information ask your dealer. See also the booklet supplied with your decoder.

Connect a decoder with an aerial socket to the TV

- Connect the aerial cable.

Connect a decoder without an aerial socket to the TV

- Connect the decoder to your TV with a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack). When your decoder has a Euroconnector / RCA Jack you can obtain better picture quality if you connect a eurocable (RCA Jack Cable) to **EXTERNAL** (RCA Jack).

TV and Video Recoder (VCR)

- Connect the Video Recorder to the ANT (antenna input) socket of the TV with the aerial cable.
- Connect the Video Recorder to the **EXT-1** or **EXT-2** terminal with the SCART cable, or connect it to the **EXT-4** terminal with the audio and video cables.

NTSC Playback

Connect a NTSC video recorder to a terminal. Then press "**AV**" button to select the corresponding AV mode.

INTSC 3.58/4.43 system is detected automatically in AV mode.

Camera and Camcorder

To connect to the EXT-4 terminal

Connect your camera or camcorder at the back side of your TV.

- Connect your equipment to the TV via **VIDEO** (yellow), **AUDIO R** (red) and **AUDIO L** (white) inputs. You should connect the jacks to the input in the same colour.

Connect the decoder to the video recorder

Some video recorders have a special euroconnector for decoder.

- Connect a eurocable to the euroconnector of your decoder and to the special euroconnector of your video recorder. See also the handbook of your video recorder.
- To connect your video recorder to the TV, see TV and Video Recorder section.

If you want to connect more equipment to your TV, consult your dealer.

Connecting Headphones

Use the stereo headphone socket on the right side of your TV, to connect headphones.

Connecting the PC

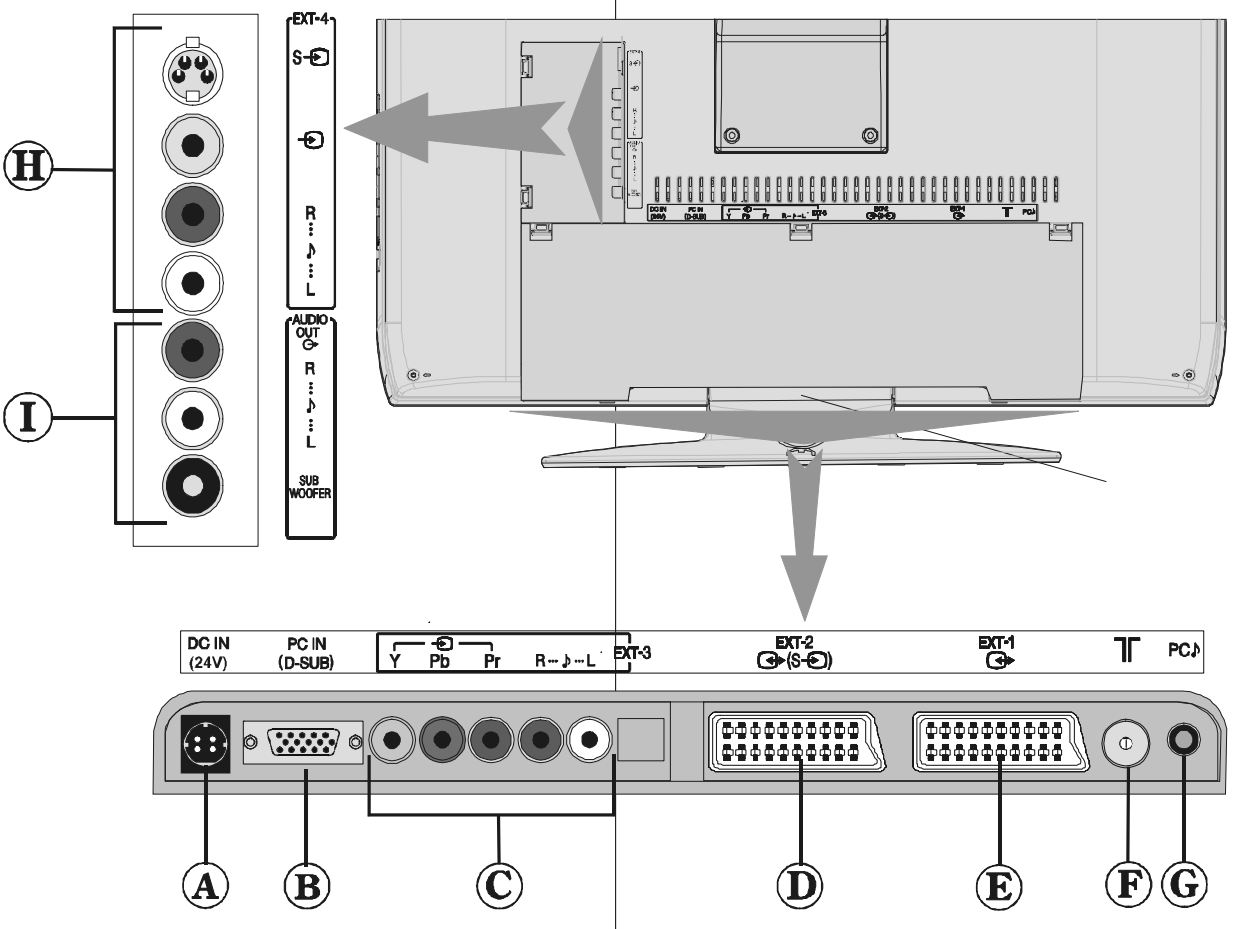
Connect PC monitor with 15-pin PC cable to the 15-pin connector on the rear of the computer. For detail installation procedure see **Installation** in PC mode.

To connect to S-Video input

Connect your camera or camcorder at the back side of your TV.

- Connect your equipment to the TV via S-Video input at the back side by using S-Video cables.

Peripheral Equipment Connections



Ⓐ DC 24 V

Ⓑ PC INPUT

Ⓒ EXT-3
- Y
- Pb
- Pr
- Component Audio In R
- Component Audio In L

Ⓓ EXT-2

Ⓔ EXT-1

Ⓕ ANTENNA

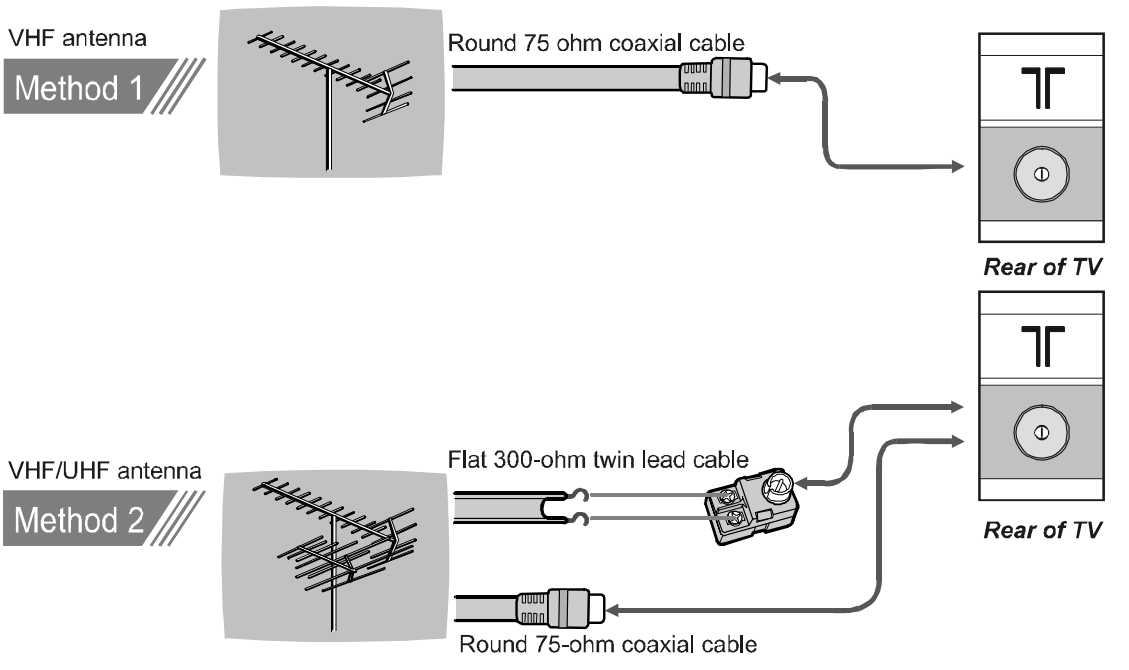
Ⓖ PC AUDIO IN

Ⓗ EXT-4
- S-Video In
- Video In
- Audio R
- Audio L

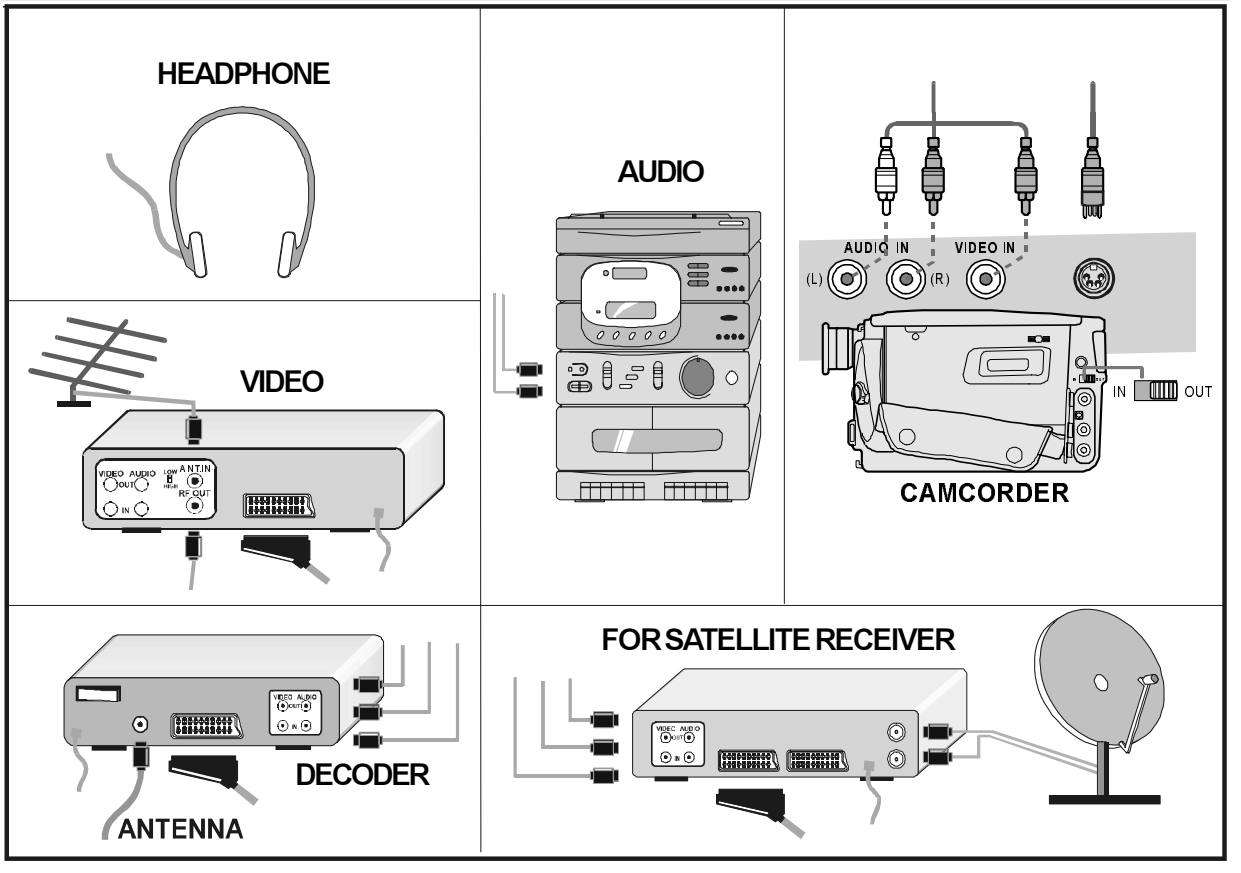
Ⓘ AUDIO OUT TERMINAL
- Audio R
- Audio L
- Subwoofer Out

Antenna Connections

Outdoor Antenna Connections



Peripheral Equipment Connections



PC Input Typical Display Modes

The display has a maximum resolution of 1360 x 768, vertical sync. frequency range of 50-75 Hz and a horizontal sync. frequency range of 30-69 KHz.

The following table is an illustration of some of the typical video display modes.

Mode	Resolution		Frequency		Sync. Polarity	
	Horizontal	Vertical	Hor. (kHz)	Ver. (Hz)	Hor.	Ver.
1	640	400	31.5	60	-	+
2	640	400	31.5	70	-	-
3	640	480	31.5	60	-	-
4	640	480	37.9	72	-	-
5	640	480	37.5	75	-	-
6	720	400	31.5	70	-	+
7	800	600	35.2	56	+	+
8	800	600	37.9	60	+	+
9	800	600	48.1	72	+	+
10	800	600	46.9	75	+	+
11	1024	768	48.4	60	-	-
12	1024	768	56.5	70	-	-
13	1024	768	60.0	75	+	+
14	1280	720	44.6	60	-	+
15	1360	768	47.7	60	+	+

The native resolution of the TFT-LCD Panel is 1360 x 768. Therefore using Mode 15 is advised to get the best PC input display quality.

Tips

Care of the Screen

Clean the screen with a slightly damp, soft cloth. Do not use abrasive solvents as they may damage the TV screen coating layer

Colors of image on screen are abnormal

Have you selected the correct TV system? Is your TV set or house aerial located too close to the loudspeakers, non-earthed audio equipment or neon lights, etc. ?

Mountains or high buildings can cause double pictures or ghost images. Sometimes you can improve the picture quality by changing the direction of the aerial.

Is the picture or Teletext unrecognisable? Check if you have entered the correct frequency.

The picture quality may degrade when two peripherals are connected to the TV at the same time. In such a case, disconnect one of the peripherals.

No Image on Display Screen

Is the aerial connected properly? Are the plugs connected tightly to the aerial socket? Is the aerial cable damaged? Are suitable plugs used to connect the aerial? If you are in doubt, consult your dealer.

No Image means that your TV is not receiving any transmission. Have you pressed the correct buttons on the remote control? Try once more.

PC Picture

If no PC picture appears, check that the D-SUB cable is connected properly. Check that your PC's resolution set correctly. See **page 30** for supported modes.

Sound

You can not hear any sound. Did you perhaps interrupt the sound, pressing "🔇" button? Are external speakers connected to the TV?

Sound is coming from only one of the speakers. Is the balance set to one direction extreme? See **Sound** menu.

Remote Control

If your TV no longer responds to the remote control, perhaps the batteries are exhausted. Replace the batteries.

Have you selected the wrong menu? Press "**MENU**" button to return to normal screen or press "**BACK**" button to return to the previous menu.

No solution

Switch your TV set off and on. If this does not work, switch off, remove the mains plug and call the service personnel; never attempt to repair it yourself.

For users in the UK:

If you have any problems setting up your new TV, please call the JVC Helpline on 0870330 5000

For users in the Republic of Ireland:

If you have any problems setting up your new TV, please call the JVC Helpline on 1890 - 582500

Specifications

Item \ Model	LT-23C88SJ
Broadcasting Systems	PAL SECAM BG, DK, I, L, Lp
Channels and Frequencies	VHF (VL) 46,25 MHz - 168,25 MHz VHF (VH) 175,25 MHz - 463,25 MHz UHF 471,25 MHz - 863,25 MHz Cable TV (S1-S20/ S21-S41)
Input Signal	**Video:** Analog 0,7 Vp-p 75 ohm positive **Sync:** TTL Level positive or negative, Seperate sync.
Horizontal Timing	30 - 69 KHz
Vertical Timing	50 - 75 Khz
Dot Rate	78,75 MHz max.
Panel Size	23,01" (583,1 mm) (measured diagonally)
Visible Picture Size	508,5 mm horizontal x 286,1 mm vertical
Display Resolution	1360 x 768 max. (WXGA)
Number of Preset Channels	100
Channel Indicator	On Screen Display (OSD)
RF Aerial Output	75 Ohm (unbalanced)
Power Requirements	**Adaptor:** 100-240 V AC, 50 Hz / **TV:** 24 V DC
Power Consumption (W)	108 W (max) / STAND-BY <3W
Sound Systems	German , Nicam Stereo
Audio Output	2 x 5 W_{RMS} (%10 THD)
EXT-1 Terminal	Euroconnector (21-pin, SCART 1) (bottom of the cabinet) • Video Input, Audio L/R Inputs and RGB inputs are available. • TV broadcast outputs (Video and Audio L/R) are available.
EXT-2 Terminal	Euroconnector (21-pin, SCART 2) (bottom of the cabinet) • Video Input, S-VIDEO (Y/C) input, Audio L/R and RGB inputs are available. • Video and Audio L/R outputs are available. • T-V Link functions are available.
EXT-3 Terminal	RCA connectors x 5 (bottom of the cabinet) • Component video (Pr, Pb, Y) inputs and Audio L-R inputs are available
EXT-4 Terminal	RCA connectors x 3 (side of the cabinet) S-VIDEO connector x 1 (side of the cabinet) • Video input, S-VIDEO (Y/C) input and Audio L/R inputs are available.
AUDIO OUT Terminal	RCA connectors x 3 • Audio L/R output are available. • Subwoofer out is available.
PC IN terminal	Analog RGB D-SUB 15 x 1 • PC signal is available (refer to page 28 for details of the signals which can be input)
PC AUDIO IN terminal	Stereo mini-jack (3.5 mm diameter)
Dimensions (W x H x D)	614 mm x 482 mm x 240 mm 614 mm x 438 mm x 79 mm (TV only)
Weight	7,4 kg (with stand) / 6,4 kg (TV only)
Accessories	Remote control unit x 1 (RM-C1860) - AA/R6 dry cell battery x 2 AC adapter x 1 Power cord x 1
Headphone jack	Stereo mini-jack (3.5 mm diameter)

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety.
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied.
- P.W. BOARD Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS	
CR	Carbon Resistor
FR	Fusible Resistor
PR	Plate Resistor
VR	Variable Resistor
HV R	High Voltage Resistor
MF R	Metal Film Resistor
MG R	Metal Glazed Resistor
MP R	Metal Plate Resistor
OM R	Metal Oxide Film Resistor
CMF R	Coating Metal Film Resistor
UNF R	Non-Flammable Resistor
CH V R	Chip Variable Resistor
CH MG R	Chip Metal Glazed Resistor
COMP. R	Composition Resistor
LPTC R	Linear Positive Temperature Coefficient Resistor

CAPACITORS	
C CAP.	Ceramic Capacitor
E CAP.	Electrolytic Capacitor
M CAP.	Mylar Capacitor
CH CAP.	Chip Capacitor
HV CAP.	High Voltage Capacitor
MF CAP.	Metalized Film Capacitor
MM CAP.	Metalized Mylar Capacitor
MP CAP.	Metalized Polystyrol Capacitor
PP CAP.	Polypropylene Capacitor
PS CAP.	Polystyrol Capacitor
TF CAP.	Thin Film Capacitor
MPP CAP.	Metalized Polypropylene Capacitor
TAN. CAP.	Tantalum Capacitor
CH C CAP.	Chip Ceramic Capacitor
BP E CAP.	Bi-Polar Electrolytic Capacitor
CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

RESISTORS									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

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PRINTED WIRING BOARD PARTS LIST
[LT-23C50BU, LT-23C50BU/Z, LT-23C50SU, LT-23C50SU/Z, LT-23C88SJ] 3-16
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PACKING PARTS LIST 3-22

USING P.W. BOARD & REMOTE CONTROL UNIT

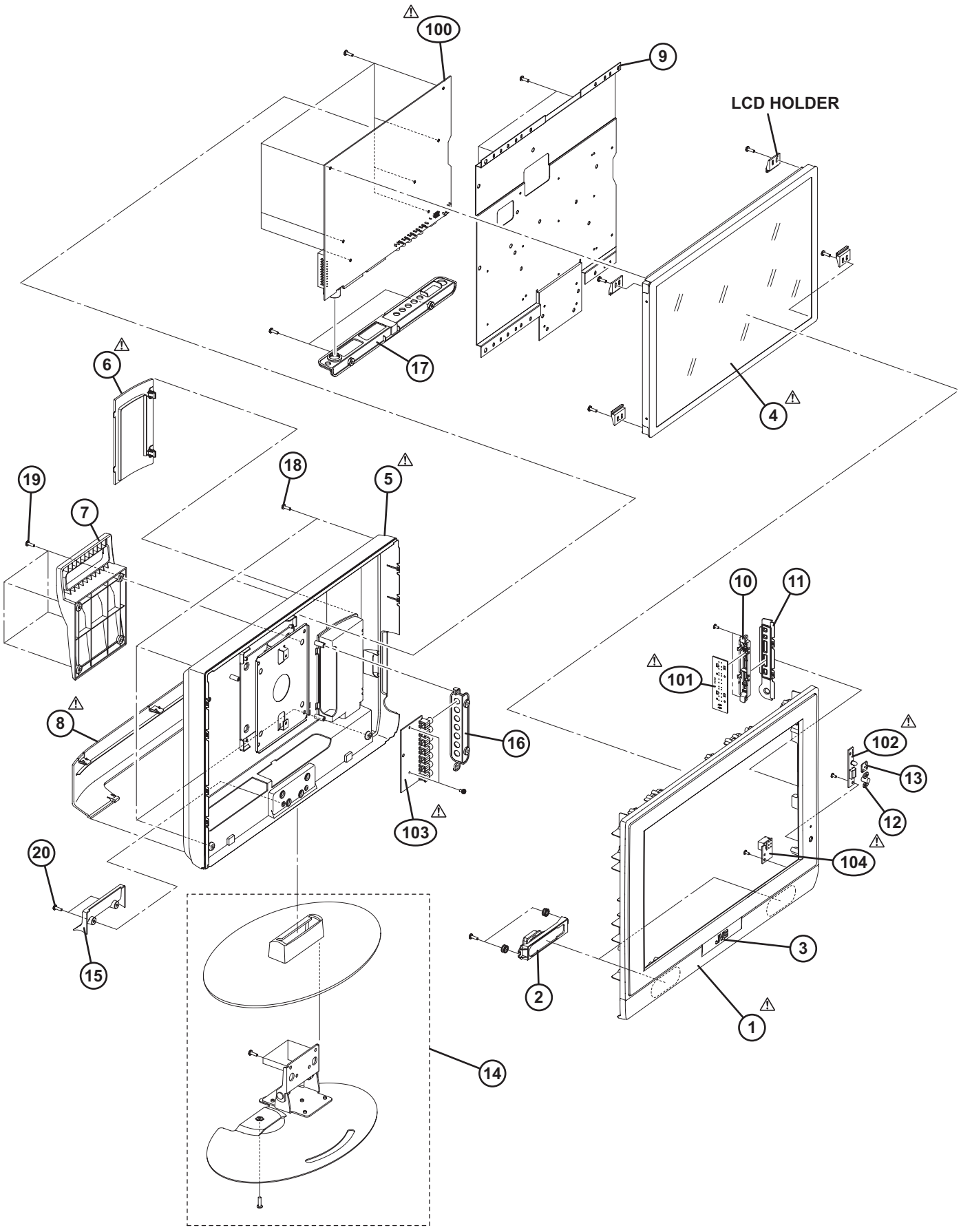
P.W.B ASS'Y	LT-23C50BJ	LT-23C50BU	LT-23C50BU/Z
MAIN PWB	VE-20182807	VE-20180595	←
SIDE CONTROL PWB	VE-20174624	←	←
LED PWB	VE-20174629	←	←
AV JACK PWB	VE-20177847	←	←
HEADPHONE PWB	VE-20177874	←	←
REMOTE CONTROL UNIT	VE-30034032	←	←

P.W.B ASS'Y	LT-23C50SU	LT-23C50SU/Z	LT-23C88SJ
MAIN PWB	VE-20180595	←	←
SIDE CONTROL PWB	VE-20174624	←	←
LED PWB	VE-20174629	←	←
AV JACK PWB	VE-20177847	←	←
HEADPHONE PWB	VE-20177874	←	←
REMOTE CONTROL UNIT	VE-30034032	←	←

EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	1	VE-20182790	FRONT COVER		LT-23C50BJ,LT-23C50BU,LT-23C50BU/Z
⚠	1	VE-20182426	FRONT COVER		LT-23C50SU,LT-23C50SU/Z,LT-23C88SJ
	2	VE-30026613	SPEAKER	(x2)	
	3	VE-40022213	LOGO JVC	SILVER	LT-23C50BJ
	3	VE-20181315	LOGO JVC		LT-23C50BU,LT-23C50SU,LT-23C88SJ
⚠	4	VE-30031695	LCD PANEL UNIT	Inc. INVERTER UNIT	
⚠	5	VE-20182427	REAR COVER	2324W (WO/CI) (SILVER 142G/P)	
⚠	6	VE-20182428	DOOR SOCKET		
	7	VE-20182430	HANDLE		
⚠	8	VE-20182443	BACK COVER		
	9	VE-35011392	MAIN FRAME		
	10	VE-20182421	BUTTON FUNCTION		
	11	VE-20170335	BUTTON FUNCTION PLATE		
	12	VE-20182420	LENS IR		
	13	VE-20170341	LENS LED		
	14	VE-20174579	FOOT ASSY		
	15	VE-20182432	FOOT COVER		
	16	VE-20182429	AV JACK FRAME		
	17	VE-20173333	MAIN FRAME		
	18	VE-35008081	SCREW M3 x 9.5	(x5)	
	19	VE-35000185	SCREW M4 x 8	(x4)	
	20	VE-35008181	SCREW M3 x 16	(x2)	
⚠	100	VE-20182807	MAIN PWB		LT-23C50BJ
⚠	100	VE-20180595	MAIN PWB		LT-23C50BU,LT-23C50SU,LT-23C88SJ
⚠	101	VE-20174624	SIDE CONTROL PWB		
⚠	102	VE-20174629	LED PWB		
⚠	103	VE-20177847	AV JACK PWB		
⚠	104	VE-20177874	HEADPHONE PWB		

EXPLODED VIEW



PRINTED WIRING BOARD PARTS LIST [LT-23C50BJ]

⚠Ref No.	Part No.	Part Name	Description	Local
IC1	VE-30001670	PREAMPLIFIER TFMS5360		
IC100	VE-30020865	IC		
IC100	VE-30020865	IC		
IC101	VE-30032066	IC		
IC101	VE-30032066	IC		
IC102	VE-30018006	IC		
IC102	VE-30018006	IC		
IC104	VE-30019132	IC		
IC104	VE-30019132	IC		
IC106	VE-30017956	IC		
IC106	VE-30017956	IC		
IC107	VE-30019372	IC		
IC107	VE-30019372	IC		
IC109	VE-30010822	IC		
IC109	VE-30010822	IC		
IC300	VE-30018652	IC		
IC301	VE-20172473	IC(MICOM)	(SERVICE)	
IC302	VE-20182788	IC(MEMORY)	(SERVICE)	
IC400	VE-30015059	IC		
IC400	VE-30015059	IC		
IC402	VE-30004999	IC		
IC403	VE-30019372	IC		
IC403	VE-30019372	IC		
IC500	VE-30021082	IC		
IC500	VE-30021082	IC		
IC600	VE-30013686	IC		
IC600	VE-30013686	IC		
IC700	VE-30018263	IC		
IC700	VE-30018263	IC		
IC701	VE-30010024	IC		
IC701	VE-30010024	IC		
IC702	VE-30027663	IC		
IC702	VE-30027663	IC		
IC705	VE-30010822	IC		
IC705	VE-30010822	IC		
IC800	VE-30017847	IC		
IC800	VE-30017847	IC		
IC901	VE-30027613	IC		
IC901	VE-30027613	IC		
IC902	VE-30014344	TRANSISTOR		
IC902	VE-30014344	TRANSISTOR		
IC904	VE-30027612	IC		
IC904	VE-30027612	IC		
IC906	VE-30018326	IC		
IC906	VE-30018326	IC		
IC907	VE-30027635	IC		
IC907	VE-30027635	IC		
IC909	VE-30007739	IC		
IC910	VE-30007739	IC		
IC910	VE-30007739	IC		
Q100	VE-30001457	TRANSISTOR SMD		
Q100	VE-30001457	TRANSISTOR SMD		
Q101	VE-30018060	TRANSISTOR		
Q101	VE-30018060	TRANSISTOR		
Q103	VE-30001457	TRANSISTOR SMD		
Q103	VE-30001457	TRANSISTOR SMD		
Q104	VE-30001457	TRANSISTOR SMD		
Q104	VE-30001457	TRANSISTOR SMD		
Q105	VE-30001457	TRANSISTOR SMD		
Q105	VE-30001457	TRANSISTOR SMD		
Q300	VE-30001458	TRANSISTOR SMD		
Q300	VE-30001458	TRANSISTOR SMD		
Q301	VE-30001457	TRANSISTOR SMD		
Q301	VE-30001457	TRANSISTOR SMD		
Q302	VE-30001457	TRANSISTOR SMD		
Q302	VE-30001457	TRANSISTOR SMD		
Q303	VE-30001457	TRANSISTOR SMD		
Q303	VE-30001457	TRANSISTOR SMD		
Q304	VE-30001457	TRANSISTOR SMD		
Q304	VE-30001457	TRANSISTOR SMD		
Q305	VE-30001457	TRANSISTOR SMD		
Q305	VE-30001457	TRANSISTOR SMD		
Q306	VE-30001457	TRANSISTOR SMD		
Q306	VE-30001457	TRANSISTOR SMD		
Q307	VE-30001457	TRANSISTOR SMD		
Q307	VE-30001457	TRANSISTOR SMD		
Q308	VE-30001458	TRANSISTOR SMD		
Q308	VE-30001458	TRANSISTOR SMD		
Q309	VE-30001457	TRANSISTOR SMD		
Q309	VE-30001457	TRANSISTOR SMD		
Q311	VE-30001423	TRANSISTOR		

⚠Ref No.	Part No.	Part Name	Description	Local
Q311	VE-30001423	TRANSISTOR		
Q313	VE-30001457	TRANSISTOR SMD		
Q313	VE-30001457	TRANSISTOR SMD		
Q314	VE-30001457	TRANSISTOR SMD		
Q314	VE-30001457	TRANSISTOR SMD		
Q315	VE-30001457	TRANSISTOR SMD		
Q315	VE-30001457	TRANSISTOR SMD		
Q316	VE-30001457	TRANSISTOR SMD		
Q316	VE-30001457	TRANSISTOR SMD		
Q317	VE-30001457	TRANSISTOR SMD		
Q317	VE-30001457	TRANSISTOR SMD		
Q400	VE-30001457	TRANSISTOR SMD		
Q400	VE-30001457	TRANSISTOR SMD		
Q501	VE-30001457	TRANSISTOR SMD		
Q501	VE-30001457	TRANSISTOR SMD		
Q600	VE-30001457	TRANSISTOR SMD		
Q600	VE-30001457	TRANSISTOR SMD		
Q601	VE-30001457	TRANSISTOR SMD		
Q601	VE-30001457	TRANSISTOR SMD		
Q602	VE-30001457	TRANSISTOR SMD		
Q602	VE-30001457	TRANSISTOR SMD		
Q603	VE-30001457	TRANSISTOR SMD		
Q603	VE-30001457	TRANSISTOR SMD		
Q700	VE-30001458	TRANSISTOR SMD		
Q700	VE-30001458	TRANSISTOR SMD		
Q701	VE-30001457	TRANSISTOR SMD		
Q701	VE-30001457	TRANSISTOR SMD		
Q702	VE-30001457	TRANSISTOR SMD		
Q702	VE-30001457	TRANSISTOR SMD		
Q703	VE-30001457	TRANSISTOR SMD		
Q703	VE-30001457	TRANSISTOR SMD		
Q704	VE-30001457	TRANSISTOR SMD		
Q704	VE-30001457	TRANSISTOR SMD		
Q705	VE-30001457	TRANSISTOR SMD		
Q705	VE-30001457	TRANSISTOR SMD		
Q706	VE-30001457	TRANSISTOR SMD		
Q706	VE-30001457	TRANSISTOR SMD		
Q708	VE-30001458	TRANSISTOR SMD		
Q708	VE-30001458	TRANSISTOR SMD		
Q709	VE-30001457	TRANSISTOR SMD		
Q709	VE-30001457	TRANSISTOR SMD		
Q900	VE-30001457	TRANSISTOR SMD		
Q900	VE-30001457	TRANSISTOR SMD		
Q901	VE-30001457	TRANSISTOR SMD		
Q901	VE-30001457	TRANSISTOR SMD		
Q902	VE-30001454	TRANSISTOR		
Q902	VE-30001454	TRANSISTOR		
Q904	VE-30001457	TRANSISTOR SMD		
Q904	VE-30001457	TRANSISTOR SMD		
Q905	VE-30001457	TRANSISTOR SMD		
Q905	VE-30001457	TRANSISTOR SMD		
D1	VE-30016020	DIODE		
D100	VE-30001285	DIODE SMD		
D100	VE-30001285	DIODE SMD		
D101	VE-30001285	DIODE SMD		
D101	VE-30001285	DIODE SMD		
D103	VE-30007169	DIODE		
D103	VE-30007169	DIODE		
D105	VE-30007169	DIODE		
D105	VE-30007169	DIODE		
D107	VE-30007169	DIODE		
D107	VE-30007169	DIODE		
D108	VE-30025773	DIODE SMD		
D108	VE-30025773	DIODE SMD		
D109	VE-30025773	DIODE SMD		
D109	VE-30025773	DIODE SMD		
D111	VE-30007169	DIODE		
D111	VE-30007169	DIODE		
D112	VE-30007169	DIODE		
D112	VE-30007169	DIODE		
D114	VE-30007763	DIODE SMD		
D114	VE-30007763	DIODE SMD		
D300	VE-30012412	DIODE SMD		
D300	VE-30012412	DIODE SMD		
D301	VE-30001285	DIODE SMD		
D301	VE-30001285	DIODE SMD		
D302	VE-30001285	DIODE SMD		
D302	VE-30001285	DIODE SMD		
D305	VE-30001285	DIODE SMD		
D305	VE-30001285	DIODE SMD		
D306	VE-30001285	DIODE SMD		
D306	VE-30001285	DIODE SMD		
D307	VE-30001285	DIODE SMD		

⚠Ref No.	Part No.	Part Name	Description Local
D307	VE-30001285	DIODE SMD	
D500	VE-30001285	DIODE SMD	
D500	VE-30001285	DIODE SMD	
D600	VE-30007760	DIODE SMD	
D600	VE-30007760	DIODE SMD	
D700	VE-30007761	DIODE SMD	
D700	VE-30007761	DIODE SMD	
D701	VE-30001285	DIODE SMD	
D701	VE-30001285	DIODE SMD	
D702	VE-30001285	DIODE SMD	
D702	VE-30001285	DIODE SMD	
D703	VE-30001285	DIODE SMD	
D703	VE-30001285	DIODE SMD	
D704	VE-30007760	DIODE SMD	
D704	VE-30007760	DIODE SMD	
D706	VE-30007760	DIODE SMD	
D706	VE-30007760	DIODE SMD	
D707	VE-30007760	DIODE SMD	
D707	VE-30007760	DIODE SMD	
D708	VE-30007760	DIODE SMD	
D708	VE-30007760	DIODE SMD	
D709	VE-30007760	DIODE SMD	
D709	VE-30007760	DIODE SMD	
D710	VE-30007760	DIODE SMD	
D710	VE-30007760	DIODE SMD	
D711	VE-30007760	DIODE SMD	
D711	VE-30007760	DIODE SMD	
D712	VE-30007760	DIODE SMD	
D712	VE-30007760	DIODE SMD	
D713	VE-30007760	DIODE SMD	
D713	VE-30007760	DIODE SMD	
D714	VE-30007760	DIODE SMD	
D714	VE-30007760	DIODE SMD	
D715	VE-30007760	DIODE SMD	
D715	VE-30007760	DIODE SMD	
D716	VE-30007760	DIODE SMD	
D716	VE-30007760	DIODE SMD	
D717	VE-30007760	DIODE SMD	
D717	VE-30007760	DIODE SMD	
D719	VE-30001285	DIODE SMD	
D719	VE-30001285	DIODE SMD	
D720	VE-30007760	DIODE SMD	
D720	VE-30007760	DIODE SMD	
D721	VE-30007760	DIODE SMD	
D721	VE-30007760	DIODE SMD	
D722	VE-30007760	DIODE SMD	
D722	VE-30007760	DIODE SMD	
D723	VE-30018574	DIODE	
D723	VE-30018574	DIODE	
D725	VE-30009699	DIODE SMD	
D725	VE-30009699	DIODE SMD	
D726	VE-30009699	DIODE SMD	
D726	VE-30009699	DIODE SMD	
D900	VE-30001313	DIODE	
D901	VE-30001313	DIODE	
D902	VE-30001285	DIODE SMD	
D902	VE-30001285	DIODE SMD	
D903	VE-30001343	DIODE	
D903	VE-30001343	DIODE	
D904	VE-30001313	DIODE	
D905	VE-30001285	DIODE SMD	
D905	VE-30001285	DIODE SMD	
D906	VE-30001285	DIODE SMD	
D906	VE-30001285	DIODE SMD	
C1	VE-30000371	E CAPACITOR	22uF 50V M
C100	VE-30012566	CAPACITOR SMD	22pF 50V J
C100	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C100	VE-30012566	CAPACITOR SMD	22pF 50V J
C101	VE-30012566	CAPACITOR SMD	22pF 50V J
C101	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C101	VE-30012566	CAPACITOR SMD	22pF 50V J
C102	VE-30000190	C CAPACITOR	100pF 50V J CH
C102	VE-30016654	CAPACITOR SMD	100nF 16V K R
C102	VE-30016654	CAPACITOR SMD	100nF 16V K R
C103	VE-30000190	C CAPACITOR	100pF 50V J CH
C104	VE-30000190	C CAPACITOR	100pF 50V J CH
C104	VE-30016654	CAPACITOR SMD	100nF 16V K R
C104	VE-30016654	CAPACITOR SMD	100nF 16V K R
C105	VE-30000190	C CAPACITOR	100pF 50V J CH
C105	VE-30016654	CAPACITOR SMD	100nF 16V K R
C105	VE-30016654	CAPACITOR SMD	100nF 16V K R
C106	VE-30000190	C CAPACITOR	100pF 50V J CH
C106	VE-30016654	CAPACITOR SMD	100nF 16V K R
C106	VE-30016654	CAPACITOR SMD	100nF 16V K R
C107	VE-30000190	C CAPACITOR	100pF 50V J CH
C107	VE-30016654	CAPACITOR SMD	100nF 16V K R

⚠Ref No.	Part No.	Part Name	Description Local
C107	VE-30016654	CAPACITOR SMD	100nF 16V K R
C108	VE-30000190	C CAPACITOR	100pF 50V J CH
C108	VE-30012582	CAPACITOR SMD	10nF 50V K R
C108	VE-30012582	CAPACITOR SMD	10nF 50V K R
C109	VE-30012582	CAPACITOR SMD	10nF 50V K R
C109	VE-30012582	CAPACITOR SMD	10nF 50V K R
C110	VE-30012582	CAPACITOR SMD	10nF 50V K R
C110	VE-30012582	CAPACITOR SMD	10nF 50V K R
C111	VE-30012582	CAPACITOR SMD	10nF 50V K R
C111	VE-30012582	CAPACITOR SMD	10nF 50V K R
C112	VE-30016654	CAPACITOR SMD	100nF 16V K R
C112	VE-30016654	CAPACITOR SMD	100nF 16V K R
C113	VE-30012582	CAPACITOR SMD	10nF 50V K R
C113	VE-30012582	CAPACITOR SMD	10nF 50V K R
C114	VE-30016654	CAPACITOR SMD	100nF 16V K R
C114	VE-30016654	CAPACITOR SMD	100nF 16V K R
C115	VE-30000371	E CAPACITOR	22uF 50V M
C115	VE-30000371	E CAPACITOR	22uF 50V M
C116	VE-30012590	CAPACITOR SMD	47nF 50V K
C116	VE-30012590	CAPACITOR SMD	47nF 50V K
C117	VE-30012590	CAPACITOR SMD	47nF 50V K
C117	VE-30012590	CAPACITOR SMD	47nF 50V K
C118	VE-30012590	CAPACITOR SMD	47nF 50V K
C118	VE-30012590	CAPACITOR SMD	47nF 50V K
C120	VE-30016654	CAPACITOR SMD	100nF 16V K R
C120	VE-30016654	CAPACITOR SMD	100nF 16V K R
C121	VE-30016654	CAPACITOR SMD	100nF 16V K R
C121	VE-30016654	CAPACITOR SMD	100nF 16V K R
C122	VE-30016654	CAPACITOR SMD	100nF 16V K R
C122	VE-30016654	CAPACITOR SMD	100nF 16V K R
C123	VE-30016654	CAPACITOR SMD	100nF 16V K R
C123	VE-30016654	CAPACITOR SMD	100nF 16V K R
C124	VE-30016654	CAPACITOR SMD	100nF 16V K R
C124	VE-30016654	CAPACITOR SMD	100nF 16V K R
C125	VE-30016654	CAPACITOR SMD	100nF 16V K R
C125	VE-30016654	CAPACITOR SMD	100nF 16V K R
C126	VE-30016654	CAPACITOR SMD	100nF 16V K R
C126	VE-30016654	CAPACITOR SMD	100nF 16V K R
C127	VE-30016654	CAPACITOR SMD	100nF 16V K R
C127	VE-30016654	CAPACITOR SMD	100nF 16V K R
C128	VE-30016654	CAPACITOR SMD	100nF 16V K R
C128	VE-30016654	CAPACITOR SMD	100nF 16V K R
C129	VE-30016654	CAPACITOR SMD	100nF 16V K R
C129	VE-30016654	CAPACITOR SMD	100nF 16V K R
C130	VE-30016654	CAPACITOR SMD	100nF 16V K R
C130	VE-30016654	CAPACITOR SMD	100nF 16V K R
C131	VE-30016654	CAPACITOR SMD	100nF 16V K R
C131	VE-30016654	CAPACITOR SMD	100nF 16V K R
C132	VE-30012581	CAPACITOR SMD	1nF 50V K R
C132	VE-30012581	CAPACITOR SMD	1nF 50V K R
C133	VE-30012587	CAPACITOR SMD	3.3nF 50V K
C133	VE-30012587	CAPACITOR SMD	3.3nF 50V K
C134	VE-30012605	CAPACITOR SMD	39nF 50V M
C134	VE-30012605	CAPACITOR SMD	39nF 50V M
C136	VE-30016654	CAPACITOR SMD	100nF 16V K R
C136	VE-30016654	CAPACITOR SMD	100nF 16V K R
C137	VE-30016654	CAPACITOR SMD	100nF 16V K R
C137	VE-30016654	CAPACITOR SMD	100nF 16V K R
C138	VE-30000371	E CAPACITOR	22uF 50V M
C138	VE-30000371	E CAPACITOR	22uF 50V M
C139	VE-30000371	E CAPACITOR	22uF 50V M
C139	VE-30000371	E CAPACITOR	22uF 50V M
C146	VE-30000109	CAPACITOR MKT	470nF 63V J
C146	VE-30000109	CAPACITOR MKT	470nF 63V J
C147	VE-30016654	CAPACITOR SMD	100nF 16V K R
C147	VE-30016654	CAPACITOR SMD	100nF 16V K R
C148	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH
C148	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH
C149	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH
C149	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH
C150	VE-30016654	CAPACITOR SMD	100nF 16V K R
C150	VE-30016654	CAPACITOR SMD	100nF 16V K R
C151	VE-30016654	CAPACITOR SMD	100nF 16V K R
C151	VE-30016654	CAPACITOR SMD	100nF 16V K R
C152	VE-30016654	CAPACITOR SMD	100nF 16V K R
C152	VE-30016654	CAPACITOR SMD	100nF 16V K R
C153	VE-30012567	CAPACITOR SMD	220pF 50V J
C153	VE-30012567	CAPACITOR SMD	220pF 50V J
C154	VE-30012567	CAPACITOR SMD	220pF 50V J
C154	VE-30012567	CAPACITOR SMD	220pF 50V J
C155	VE-30012567	CAPACITOR SMD	220pF 50V J
C155	VE-30012567	CAPACITOR SMD	220pF 50V J
C156	VE-30000371	E CAPACITOR	22uF 50V M
C156	VE-30000371	E CAPACITOR	22uF 50V M
C157	VE-30016654	CAPACITOR SMD	100nF 16V K R
C157	VE-30016654	CAPACITOR SMD	100nF 16V K R
C158	VE-30012567	CAPACITOR SMD	220pF 50V J

⚠Ref No.	Part No.	Part Name	Description	Local
C158	VE-30012567	CAPACITOR SMD	220pF 50V J	
C159	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C159	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C160	VE-30012567	CAPACITOR SMD	220pF 50V J	
C160	VE-30012567	CAPACITOR SMD	220pF 50V J	
C161	VE-30012567	CAPACITOR SMD	220pF 50V J	
C161	VE-30012567	CAPACITOR SMD	220pF 50V J	
C162	VE-30000371	E CAPACITOR	22uF 50V M	
C162	VE-30000371	E CAPACITOR	22uF 50V M	
C163	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C163	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C164	VE-30012567	CAPACITOR SMD	220pF 50V J	
C164	VE-30012567	CAPACITOR SMD	220pF 50V J	
C165	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C165	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C166	VE-30012567	CAPACITOR SMD	220pF 50V J	
C166	VE-30012567	CAPACITOR SMD	220pF 50V J	
C167	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C167	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C168	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C168	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C169	VE-30012567	CAPACITOR SMD	220pF 50V J	
C169	VE-30012567	CAPACITOR SMD	220pF 50V J	
C170	VE-30012567	CAPACITOR SMD	220pF 50V J	
C170	VE-30012567	CAPACITOR SMD	220pF 50V J	
C171	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C171	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C172	VE-30012567	CAPACITOR SMD	220pF 50V J	
C172	VE-30012567	CAPACITOR SMD	220pF 50V J	
C174	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C174	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C175	VE-30012567	CAPACITOR SMD	220pF 50V J	
C175	VE-30012567	CAPACITOR SMD	220pF 50V J	
C176	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C176	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C177	VE-30000371	E CAPACITOR	22uF 50V M	
C177	VE-30000371	E CAPACITOR	22uF 50V M	
C178	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C178	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C183	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C183	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C185	VE-30000352	E CAPACITOR	100uF 16V M	
C185	VE-30000352	E CAPACITOR	100uF 16V M	
C187	VE-30012573	CAPACITOR SMD	47pF 50V J	
C187	VE-30012573	CAPACITOR SMD	47pF 50V J	
C189	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C189	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C190	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C190	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C217	VE-30012581	CAPACITOR SMD	1nF 50V K R	
C217	VE-30012581	CAPACITOR SMD	1nF 50V K R	
C218	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH	
C218	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH	
C219	VE-30024742	E CAPACITOR	10uF 16V N.POL	
C219	VE-30024742	E CAPACITOR	10uF 16V N.POL	
C300	VE-30000352	E CAPACITOR	100uF 16V M	
C300	VE-30000352	E CAPACITOR	100uF 16V M	
C301	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C301	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C302	VE-30000371	E CAPACITOR	22uF 50V M	
C302	VE-30000371	E CAPACITOR	22uF 50V M	
C303	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C303	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C304	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C304	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C305	VE-30000371	E CAPACITOR	22uF 50V M	
C305	VE-30000371	E CAPACITOR	22uF 50V M	
C306	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C306	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C307	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C307	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C308	VE-30000371	E CAPACITOR	22uF 50V M	
C308	VE-30000371	E CAPACITOR	22uF 50V M	
C309	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C309	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C310	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C310	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C311	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C311	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C312	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C312	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C313	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C313	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C314	VE-30000109	CAPACITOR MKT	470nF 63V J	
C314	VE-30000109	CAPACITOR MKT	470nF 63V J	
C315	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C315	VE-30016654	CAPACITOR SMD	100nF 16V K R	

⚠Ref No.	Part No.	Part Name	Description	Local
C316	VE-30000352	E CAPACITOR	100uF 16V M	
C316	VE-30000352	E CAPACITOR	100uF 16V M	
C317	VE-30012569	CAPACITOR SMD	33pF 50V J	
C317	VE-30012569	CAPACITOR SMD	33pF 50V J	
C318	VE-30012569	CAPACITOR SMD	33pF 50V J	
C318	VE-30012569	CAPACITOR SMD	33pF 50V J	
C319	VE-30000371	E CAPACITOR	22uF 50V M	
C319	VE-30000371	E CAPACITOR	22uF 50V M	
C320	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C320	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C321	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C321	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C324	VE-30000371	E CAPACITOR	22uF 50V M	
C324	VE-30000371	E CAPACITOR	22uF 50V M	
C325	VE-30012611	CAPACITOR SMD	120pF 50V J	
C325	VE-30012611	CAPACITOR SMD	120pF 50V J	
C326	VE-30012576	CAPACITOR SMD	56pF 50V J CH	
C326	VE-30012576	CAPACITOR SMD	56pF 50V J CH	
C327	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C327	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C328	VE-30000393	E CAPACITOR	3.3uF 50V M	
C328	VE-30000393	E CAPACITOR	3.3uF 50V M	
C332	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C332	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C334	VE-30000354	E CAPACITOR	100uF 35V M	
C334	VE-30000354	E CAPACITOR	100uF 35V M	
C335	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C335	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C336	VE-30012611	CAPACITOR SMD	120pF 50V J	
C336	VE-30012611	CAPACITOR SMD	120pF 50V J	
C337	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C337	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C400	VE-30012609	CAPACITOR SMD	68nF 50V K	
C400	VE-30012609	CAPACITOR SMD	68nF 50V K	
C401	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C401	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C402	VE-30012590	CAPACITOR SMD	47nF 50V K	
C402	VE-30012590	CAPACITOR SMD	47nF 50V K	
C403	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C403	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C404	VE-30012613	CAPACITOR SMD	3.3pF 50V C CH	
C404	VE-30012613	CAPACITOR SMD	3.3pF 50V C CH	
C405	VE-30012613	CAPACITOR SMD	3.3pF 50V C CH	
C405	VE-30012613	CAPACITOR SMD	3.3pF 50V C CH	
C406	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C406	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C407	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C407	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C408	VE-30012572	CAPACITOR SMD	390pF 50V J	
C408	VE-30012572	CAPACITOR SMD	390pF 50V J	
C409	VE-30000345	E CAPACITOR	10uF 50V M	
C409	VE-30000345	E CAPACITOR	10uF 50V M	
C410	VE-30012590	CAPACITOR SMD	47nF 50V K	
C410	VE-30012590	CAPACITOR SMD	47nF 50V K	
C411	VE-30000068	CAPACITOR MKT	1nF 63V K	
C411	VE-30000068	CAPACITOR MKT	1nF 63V K	
C412	VE-30007082	CAPACITOR MKT	680nF 63V J	
C412	VE-30007082	CAPACITOR MKT	680nF 63V J	
C413	VE-30007082	CAPACITOR MKT	680nF 63V J	
C413	VE-30007082	CAPACITOR MKT	680nF 63V J	
C414	VE-30012582	CAPACITOR SMD	10nF 50V K R	
C414	VE-30012582	CAPACITOR SMD	10nF 50V K R	
C415	VE-30000345	E CAPACITOR	10uF 50V M	
C415	VE-30000345	E CAPACITOR	10uF 50V M	
C416	VE-30012590	CAPACITOR SMD	47nF 50V K	
C416	VE-30012590	CAPACITOR SMD	47nF 50V K	
C420	VE-30000294	CAPACITOR SMD	100nF 50V K	
C420	VE-30000294	CAPACITOR SMD	100nF 50V K	
C421	VE-30000294	CAPACITOR SMD	100nF 50V K	
C421	VE-30000294	CAPACITOR SMD	100nF 50V K	
C422	VE-30000294	CAPACITOR SMD	100nF 50V K	
C422	VE-30000294	CAPACITOR SMD	100nF 50V K	
C424	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C424	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C425	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C425	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C426	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C426	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C427	VE-30012572	CAPACITOR SMD	390pF 50V J	
C427	VE-30012572	CAPACITOR SMD	390pF 50V J	
C428	VE-30012590	CAPACITOR SMD	47nF 50V K	
C428	VE-30012590	CAPACITOR SMD	47nF 50V K	
C429	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C429	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C430	VE-30012609	CAPACITOR SMD	68nF 50V K	
C430	VE-30012609	CAPACITOR SMD	68nF 50V K	
C431	VE-30000315	CAPACITOR SMD	220nF 25V Z	

⚠Ref No.	Part No.	Part Name	Description Local
C431	VE-30000315	CAPACITOR SMD	220nF 25V Z
C432	VE-30000315	CAPACITOR SMD	220nF 25V Z
C432	VE-30000315	CAPACITOR SMD	220nF 25V Z
C433	VE-30000315	CAPACITOR SMD	220nF 25V Z
C433	VE-30000315	CAPACITOR SMD	220nF 25V Z
C434	VE-30012570	CAPACITOR SMD	330pF 50V J
C434	VE-30012570	CAPACITOR SMD	330pF 50V J
C435	VE-30012570	CAPACITOR SMD	330pF 50V J
C435	VE-30012570	CAPACITOR SMD	330pF 50V J
C436	VE-30012570	CAPACITOR SMD	330pF 50V J
C436	VE-30012570	CAPACITOR SMD	330pF 50V J
C437	VE-30007082	CAPACITOR MKT	680nF 63V J
C437	VE-30007082	CAPACITOR MKT	680nF 63V J
C438	VE-30000371	E CAPACITOR	22uF 50V M
C438	VE-30000371	E CAPACITOR	22uF 50V M
C439	VE-30012609	CAPACITOR SMD	68nF 50V K
C439	VE-30012609	CAPACITOR SMD	68nF 50V K)
C440	VE-30000352	E CAPACITOR	100uF 16V M
C440	VE-30000352	E CAPACITOR	100uF 16V M
C441	VE-30016654	CAPACITOR SMD	100nF 16V K R
C441	VE-30016654	CAPACITOR SMD	100nF 16V K R
C442	VE-30012569	CAPACITOR SMD	33pF 50V J
C442	VE-30012569	CAPACITOR SMD	33pF 50V J
C443	VE-30016654	CAPACITOR SMD	100nF 16V K R
C443	VE-30016654	CAPACITOR SMD	100nF 16V K R
C485	VE-30016654	CAPACITOR SMD	100nF 16V K R
C485	VE-30016654	CAPACITOR SMD	100nF 16V K R
C486	VE-30016654	CAPACITOR SMD	100nF 16V K R
C486	VE-30016654	CAPACITOR SMD	100nF 16V K R
C487	VE-30016654	CAPACITOR SMD	100nF 16V K R
C487	VE-30016654	CAPACITOR SMD	100nF 16V K R
C488	VE-30016654	CAPACITOR SMD	100nF 16V K R
C488	VE-30016654	CAPACITOR SMD	100nF 16V K R
C489	VE-30016654	CAPACITOR SMD	100nF 16V K R
C489	VE-30016654	CAPACITOR SMD	100nF 16V K R
C490	VE-30016654	CAPACITOR SMD	100nF 16V K R
C490	VE-30016654	CAPACITOR SMD	100nF 16V K R
C491	VE-30016654	CAPACITOR SMD	100nF 16V K R
C491	VE-30016654	CAPACITOR SMD	100nF 16V K R
C492	VE-30000345	E CAPACITOR	10uF 50V M
C492	VE-30000345	E CAPACITOR	10uF 50V M
C493	VE-30000294	CAPACITOR SMD	100nF 50V K
C493	VE-30000294	CAPACITOR SMD	100nF 50V K
C494	VE-30012569	CAPACITOR SMD	33pF 50V J
C494	VE-30012569	CAPACITOR SMD	33pF 50V J
C495	VE-30012569	CAPACITOR SMD	33pF 50V J
C495	VE-30012569	CAPACITOR SMD	33pF 50V J
C496	VE-30012569	CAPACITOR SMD	33pF 50V J
C496	VE-30012569	CAPACITOR SMD	33pF 50V J
C502	VE-30016654	CAPACITOR SMD	100nF 16V K R
C502	VE-30016654	CAPACITOR SMD	100nF 16V K R
C503	VE-30000345	E CAPACITOR	10uF 50V M
C503	VE-30000345	E CAPACITOR	10uF 50V M
C505	VE-30000400	E CAPACITOR	47uF 50V M
C505	VE-30000400	E CAPACITOR	47uF 50V M
C506	VE-30012582	CAPACITOR SMD	10nF 50V K R
C506	VE-30012582	CAPACITOR SMD	10nF 50V K R
C507	VE-30012572	CAPACITOR SMD	390pF 50V J
C507	VE-30012572	CAPACITOR SMD	390pF 50V J
C508	VE-30000109	CAPACITOR MKT	470nF 63V J
C508	VE-30000109	CAPACITOR MKT	470nF 63V J
C509	VE-30012582	CAPACITOR SMD	10nF 50V K R
C509	VE-30012582	CAPACITOR SMD	10nF 50V K R
C510	VE-30012566	CAPACITOR SMD	22pF 50V J
C510	VE-30012566	CAPACITOR SMD	22pF 50V J
C511	VE-30000109	CAPACITOR MKT	470nF 63V J
C511	VE-30000109	CAPACITOR MKT	470nF 63V J
C512	VE-30016654	CAPACITOR SMD	100nF 16V K R
C512	VE-30016654	CAPACITOR SMD	100nF 16V K R
C513	VE-30012583	CAPACITOR SMD	1.5nF 50V K
C513	VE-30012583	CAPACITOR SMD	1.5nF 50V K
C514	VE-30016654	CAPACITOR SMD	100nF 16V K R
C514	VE-30016654	CAPACITOR SMD	100nF 16V K R
C515	VE-30016654	CAPACITOR SMD	100nF 16V K R
C515	VE-30016654	CAPACITOR SMD	100nF 16V K R
C517	VE-30012569	CAPACITOR SMD	33pF 50V J
C517	VE-30012569	CAPACITOR SMD	33pF 50V J
C520	VE-30012582	CAPACITOR SMD	10nF 50V K R
C520	VE-30012582	CAPACITOR SMD	10nF 50V K R
C522	VE-30000315	CAPACITOR SMD	220nF 25V Z
C522	VE-30000315	CAPACITOR SMD	220nF 25V Z
C523	VE-30000371	E CAPACITOR	22uF 50V M
C523	VE-30000371	E CAPACITOR	22uF 50V M
C524	VE-30016654	CAPACITOR SMD	100nF 16V K R
C524	VE-30016654	CAPACITOR SMD	100nF 16V K R
C525	VE-30000407	E CAPACITOR	470uF 16V M
C525	VE-30000407	E CAPACITOR	470uF 16V M

⚠Ref No.	Part No.	Part Name	Description Local
C526	VE-30016654	CAPACITOR SMD	100nF 16V K R
C526	VE-30016654	CAPACITOR SMD	100nF 16V K R
C527	VE-30000345	E CAPACITOR	10uF 50V M
C527	VE-30000345	E CAPACITOR	10uF 50V M
C600	VE-30000352	E CAPACITOR	100uF 16V M
C600	VE-30000352	E CAPACITOR	100uF 16V M
C601	VE-30000074	CAPACITOR MKT	100nF 63V J
C601	VE-30000074	CAPACITOR MKT	100nF 63V J
C602	VE-30000074	CAPACITOR MKT	100nF 63V J
C602	VE-30000074	CAPACITOR MKT	100nF 63V J
C603	VE-30000074	CAPACITOR MKT	100nF 63V J
C603	VE-30000074	CAPACITOR MKT	100nF 63V J
C604	VE-30016654	CAPACITOR SMD	100nF 16V K R
C604	VE-30016654	CAPACITOR SMD	100nF 16V K R
C605	VE-30016654	CAPACITOR SMD	100nF 16V K R
C605	VE-30016654	CAPACITOR SMD	100nF 16V K R
C606	VE-30000074	CAPACITOR MKT	100nF 63V J
C606	VE-30000074	CAPACITOR MKT	100nF 63V J
C607	VE-30012569	CAPACITOR SMD	33pF 50V J
C607	VE-30012569	CAPACITOR SMD	33pF 50V J
C608	VE-30016654	CAPACITOR SMD	100nF 16V K R
C608	VE-30016654	CAPACITOR SMD	100nF 16V K R
C609	VE-30016654	CAPACITOR SMD	100nF 16V K R
C609	VE-30016654	CAPACITOR SMD	100nF 16V K R
C610	VE-30016654	CAPACITOR SMD	100nF 16V K R
C610	VE-30016654	CAPACITOR SMD	100nF 16V K R
C611	VE-30016654	CAPACITOR SMD	100nF 16V K R
C611	VE-30016654	CAPACITOR SMD	100nF 16V K R
C612	VE-30016654	CAPACITOR SMD	100nF 16V K R
C612	VE-30016654	CAPACITOR SMD	100nF 16V K R
C613	VE-30016654	CAPACITOR SMD	100nF 16V K R
C613	VE-30016654	CAPACITOR SMD	100nF 16V K R
C614	VE-30016654	CAPACITOR SMD	100nF 16V K R
C614	VE-30016654	CAPACITOR SMD	100nF 16V K R
C700	VE-30016654	CAPACITOR SMD	100nF 16V K R
C700	VE-30016654	CAPACITOR SMD	100nF 16V K R
C701	VE-30012581	CAPACITOR SMD	1nF 50V K R
C701	VE-30012581	CAPACITOR SMD	1nF 50V K R
C702	VE-30000352	E CAPACITOR	100uF 16V M
C702	VE-30000352	E CAPACITOR	100uF 16V M
C703	VE-30012581	CAPACITOR SMD	1nF 50V K R
C703	VE-30012581	CAPACITOR SMD	1nF 50V K R
C704	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C704	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C705	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C705	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C706	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C706	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C707	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C707	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C708	VE-30016654	CAPACITOR SMD	100nF 16V K R
C708	VE-30016654	CAPACITOR SMD	100nF 16V K R
C709	VE-30000315	CAPACITOR SMD	220nF 25V Z
C709	VE-30000315	CAPACITOR SMD	220nF 25V Z
C710	VE-30000315	CAPACITOR SMD	220nF 25V Z
C710	VE-30000315	CAPACITOR SMD	220nF 25V Z
C711	VE-30000315	CAPACITOR SMD	220nF 25V Z
C711	VE-30000315	CAPACITOR SMD	220nF 25V Z
C712	VE-30000315	CAPACITOR SMD	220nF 25V Z
C712	VE-30000315	CAPACITOR SMD	220nF 25V Z
C713	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C713	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C714	VE-30016654	CAPACITOR SMD	100nF 16V K R
C714	VE-30016654	CAPACITOR SMD	100nF 16V K R
C715	VE-30000393	E CAPACITOR	3.3uF 50V M
C715	VE-30000393	E CAPACITOR	3.3uF 50V M
C716	VE-30000345	E CAPACITOR	10uF 50V M
C716	VE-30000345	E CAPACITOR	10uF 50V M
C717	VE-30000345	E CAPACITOR	10uF 50V M
C717	VE-30000345	E CAPACITOR	10uF 50V M
C718	VE-30000345	E CAPACITOR	10uF 50V M
C718	VE-30000345	E CAPACITOR	10uF 50V M
C719	VE-30012581	CAPACITOR SMD	1nF 50V K R
C719	VE-30012581	CAPACITOR SMD	1nF 50V K R
C720	VE-30012581	CAPACITOR SMD	1nF 50V K R
C720	VE-30012581	CAPACITOR SMD	1nF 50V K R
C721	VE-30012565	CAPACITOR SMD	1.8pF 50V J CH
C721	VE-30012565	CAPACITOR SMD	1.8pF 50V J CH
C722	VE-30012565	CAPACITOR SMD	1.8pF 50V J CH
C722	VE-30012565	CAPACITOR SMD	1.8pF 50V J CH
C723	VE-30012581	CAPACITOR SMD	1nF 50V K R
C723	VE-30012581	CAPACITOR SMD	1nF 50V K R
C724	VE-30012581	CAPACITOR SMD	1nF 50V K R
C724	VE-30012581	CAPACITOR SMD	1nF 50V K R
C725	VE-30012581	CAPACITOR SMD	1nF 50V K R
C725	VE-30012581	CAPACITOR SMD	1nF 50V K R
C726	VE-30012576	CAPACITOR SMD	56pF 50V J CH

⚠Ref No.	Part No.	Part Name	Description Local
C726	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C727	VE-30016654	CAPACITOR SMD	100nF 16V K R
C727	VE-30016654	CAPACITOR SMD	100nF 16V K R
C728	VE-30016654	CAPACITOR SMD	100nF 16V K R
C728	VE-30016654	CAPACITOR SMD	100nF 16V K R
C729	VE-30012581	CAPACITOR SMD	1nF 50V K R
C729	VE-30012581	CAPACITOR SMD	1nF 50V K R
C730	VE-30012607	CAPACITOR SMD	150pF 50V J
C730	VE-30012607	CAPACITOR SMD	150pF 50V J
C731	VE-30012607	CAPACITOR SMD	150pF 50V J
C731	VE-30012607	CAPACITOR SMD	150pF 50V J
C732	VE-30000315	CAPACITOR SMD	220nF 25V Z
C732	VE-30000315	CAPACITOR SMD	220nF 25V Z
C733	VE-30000315	CAPACITOR SMD	220nF 25V Z
C733	VE-30000315	CAPACITOR SMD	220nF 25V Z
C734	VE-30016654	CAPACITOR SMD	100nF 16V K R
C734	VE-30016654	CAPACITOR SMD	100nF 16V K R
C735	VE-30012583	CAPACITOR SMD	1.5nF 50V K
C735	VE-30012583	CAPACITOR SMD	1.5nF 50V K
C736	VE-30000352	E CAPACITOR	100uF 16V M
C736	VE-30000352	E CAPACITOR	100uF 16V M
C737	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C737	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C738	VE-30000352	E CAPACITOR	100uF 16V M
C738	VE-30000352	E CAPACITOR	100uF 16V M
C739	VE-30000362	E CAPACITOR	1uF 50V M
C739	VE-30000362	E CAPACITOR	1uF 50V M
C740	VE-30012583	CAPACITOR SMD	1.5nF 50V K
C740	VE-30012583	CAPACITOR SMD	1.5nF 50V K
C741	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C741	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C742	VE-30000371	E CAPACITOR	22uF 50V M
C742	VE-30000371	E CAPACITOR	22uF 50V M
C743	VE-30000371	E CAPACITOR	22uF 50V M
C743	VE-30000371	E CAPACITOR	22uF 50V M
C744	VE-30000371	E CAPACITOR	22uF 50V M
C744	VE-30000371	E CAPACITOR	22uF 50V M
C745	VE-30000371	E CAPACITOR	22uF 50V M
C745	VE-30000371	E CAPACITOR	22uF 50V M
C746	VE-30012567	CAPACITOR SMD	220pF 50V J
C746	VE-30012567	CAPACITOR SMD	220pF 50V J
C747	VE-30012574	CAPACITOR SMD	470pF 50V J
C747	VE-30012574	CAPACITOR SMD	470pF 50V J
C748	VE-30012582	CAPACITOR SMD	10nF 50V K R
C748	VE-30012582	CAPACITOR SMD	10nF 50V K R
C749	VE-30016654	CAPACITOR SMD	100nF 16V K R
C749	VE-30016654	CAPACITOR SMD	100nF 16V K R
C750	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C750	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C751	VE-30000407	E CAPACITOR	470uF 16V M
C751	VE-30000407	E CAPACITOR	470uF 16V M
C752	VE-30012581	CAPACITOR SMD	1nF 50V K R
C752	VE-30012581	CAPACITOR SMD	1nF 50V K R
C753	VE-30012581	CAPACITOR SMD	1nF 50V K R
C753	VE-30012581	CAPACITOR SMD	1nF 50V K R
C754	VE-30012574	CAPACITOR SMD	470pF 50V J
C754	VE-30012574	CAPACITOR SMD	470pF 50V J
C755	VE-30012574	CAPACITOR SMD	470pF 50V J
C755	VE-30012574	CAPACITOR SMD	470pF 50V J
C756	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C756	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C757	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C757	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C758	VE-30000315	CAPACITOR SMD	220nF 25V Z
C758	VE-30000315	CAPACITOR SMD	220nF 25V Z
C759	VE-30000315	CAPACITOR SMD	220nF 25V Z
C759	VE-30000315	CAPACITOR SMD	220nF 25V Z
C760	VE-30012581	CAPACITOR SMD	1nF 50V K R
C760	VE-30012581	CAPACITOR SMD	1nF 50V K R
C761	VE-30012581	CAPACITOR SMD	1nF 50V K R
C761	VE-30012581	CAPACITOR SMD	1nF 50V K R
C762	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C762	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C763	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C763	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C764	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C764	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C765	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C765	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C766	VE-30016654	CAPACITOR SMD	100nF 16V K R
C766	VE-30016654	CAPACITOR SMD	100nF 16V K R
C767	VE-30012607	CAPACITOR SMD	150pF 50V J
C767	VE-30012607	CAPACITOR SMD	150pF 50V J
C768	VE-30012607	CAPACITOR SMD	150pF 50V J
C768	VE-30012607	CAPACITOR SMD	150pF 50V J
C769	VE-30000371	E CAPACITOR	22uF 50V M
C769	VE-30000371	E CAPACITOR	22uF 50V M

⚠Ref No.	Part No.	Part Name	Description Local
C770	VE-30000371	E CAPACITOR	22uF 50V M
C770	VE-30000371	E CAPACITOR	22uF 50V M
C771	VE-30000315	CAPACITOR SMD	220nF 25V Z
C771	VE-30000315	CAPACITOR SMD	220nF 25V Z
C772	VE-30012581	CAPACITOR SMD	1nF 50V K R
C772	VE-30012581	CAPACITOR SMD	1nF 50V K R
C773	VE-30000315	CAPACITOR SMD	220nF 25V Z
C773	VE-30000315	CAPACITOR SMD	220nF 25V Z
C774	VE-30012581	CAPACITOR SMD	1nF 50V K R
C774	VE-30012581	CAPACITOR SMD	1nF 50V K R
C775	VE-30000345	E CAPACITOR	10uF 50V M
C775	VE-30000345	E CAPACITOR	10uF 50V M
C776	VE-30000294	CAPACITOR SMD	100nF 50V K
C776	VE-30000294	CAPACITOR SMD	100nF 50V K
C777	VE-30000294	CAPACITOR SMD	100nF 50V K
C777	VE-30000294	CAPACITOR SMD	100nF 50V K
C778	VE-30000294	CAPACITOR SMD	100nF 50V K
C778	VE-30000294	CAPACITOR SMD	100nF 50V K
C779	VE-30012567	CAPACITOR SMD	220pF 50V J
C779	VE-30012567	CAPACITOR SMD	220pF 50V J
C780	VE-30012582	CAPACITOR SMD	10nF 50V K R
C780	VE-30012582	CAPACITOR SMD	10nF 50V K R
C781	VE-30012582	CAPACITOR SMD	10nF 50V K R
C781	VE-30012582	CAPACITOR SMD	10nF 50V K R
C782	VE-30000294	CAPACITOR SMD	100nF 50V K
C782	VE-30000294	CAPACITOR SMD	100nF 50V K
C783	VE-30000294	CAPACITOR SMD	100nF 50V K
C783	VE-30000294	CAPACITOR SMD	100nF 50V K
C784	VE-30000345	E CAPACITOR	10uF 50V M
C784	VE-30000345	E CAPACITOR	10uF 50V M
C785	VE-30012581	CAPACITOR SMD	1nF 50V K R
C785	VE-30012581	CAPACITOR SMD	1nF 50V K R
C786	VE-30012581	CAPACITOR SMD	1nF 50V K R
C786	VE-30012581	CAPACITOR SMD	1nF 50V K R
C787	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C787	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C788	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C788	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C789	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C789	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C790	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C790	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C791	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C791	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C792	VE-30000294	CAPACITOR SMD	100nF 50V K
C792	VE-30000294	CAPACITOR SMD	100nF 50V K
C793	VE-30012582	CAPACITOR SMD	10nF 50V K R
C793	VE-30012582	CAPACITOR SMD	10nF 50V K R
C794	VE-30012582	CAPACITOR SMD	10nF 50V K R
C794	VE-30012582	CAPACITOR SMD	10nF 50V K R
C795	VE-30012581	CAPACITOR SMD	1nF 50V K R
C795	VE-30012581	CAPACITOR SMD	1nF 50V K R
C796	VE-30012581	CAPACITOR SMD	1nF 50V K R
C796	VE-30012581	CAPACITOR SMD	1nF 50V K R
C797	VE-30000294	CAPACITOR SMD	100nF 50V K
C797	VE-30000294	CAPACITOR SMD	100nF 50V K
C798	VE-30012574	CAPACITOR SMD	470pF 50V J
C798	VE-30012574	CAPACITOR SMD	470pF 50V J
C799	VE-30012567	CAPACITOR SMD	220pF 50V J
C799	VE-30012567	CAPACITOR SMD	220pF 50V J
C801	VE-30000294	CAPACITOR SMD	100nF 50V K
C801	VE-30000294	CAPACITOR SMD	100nF 50V K
C802	VE-30000294	CAPACITOR SMD	100nF 50V K
C802	VE-30000294	CAPACITOR SMD	100nF 50V K
C803	VE-30000345	E CAPACITOR	10uF 50V M
C803	VE-30000345	E CAPACITOR	10uF 50V M
C804	VE-30016654	CAPACITOR SMD	100nF 16V K R
C804	VE-30016654	CAPACITOR SMD	100nF 16V K R
C805	VE-30012581	CAPACITOR SMD	1nF 50V K R
C805	VE-30012581	CAPACITOR SMD	1nF 50V K R
C806	VE-30000354	E CAPACITOR	100uF 35V M
C806	VE-30000354	E CAPACITOR	100uF 35V M
C807	VE-30012574	CAPACITOR SMD	470pF 50V J
C807	VE-30012574	CAPACITOR SMD	470pF 50V J
C808	VE-30000315	CAPACITOR SMD	220nF 25V Z
C808	VE-30016654	CAPACITOR SMD	100nF 16V K R
C808	VE-30000315	CAPACITOR SMD	220nF 25V Z
C809	VE-30000315	CAPACITOR SMD	220nF 25V Z
C809	VE-30000315	CAPACITOR SMD	220nF 25V Z
C810	VE-30012582	CAPACITOR SMD	10nF 50V K R
C810	VE-30012582	CAPACITOR SMD	10nF 50V K R
C811	VE-30016654	CAPACITOR SMD	100nF 16V K R
C811	VE-30016654	CAPACITOR SMD	100nF 16V K R
C812	VE-30000315	CAPACITOR SMD	220nF 25V Z
C812	VE-30000315	CAPACITOR SMD	220nF 25V Z
C814	VE-30016654	CAPACITOR SMD	100nF 16V K R
C814	VE-30016654	CAPACITOR SMD	100nF 16V K R

⚠Ref No.	Part No.	Part Name	Description Local
C815	VE-30012582	CAPACITOR SMD	10nF 50V K R
C815	VE-30012582	CAPACITOR SMD	10nF 50V K R
C816	VE-30012582	CAPACITOR SMD	10nF 50V K R
C816	VE-30012582	CAPACITOR SMD	10nF 50V K R
C817	VE-30016654	CAPACITOR SMD	100nF 16V K R
C817	VE-30016654	CAPACITOR SMD	100nF 16V K R
C818	VE-30016654	CAPACITOR SMD	100nF 16V K R
C818	VE-30016654	CAPACITOR SMD	100nF 16V K R
C820	VE-30000315	CAPACITOR SMD	220nF 25V Z
C820	VE-30000315	CAPACITOR SMD	220nF 25V Z
C823	VE-30012560	CAPACITOR SMD	100pF 50V J
C823	VE-30012560	CAPACITOR SMD	100pF 50V J
C824	VE-30012560	CAPACITOR SMD	100pF 50V J
C824	VE-30012560	CAPACITOR SMD	100pF 50V J
C825	VE-30012581	CAPACITOR SMD	1nF 50V K R
C825	VE-30012581	CAPACITOR SMD	1nF 50V K R
C827	VE-30000352	E CAPACITOR	100uF 16V M
C827	VE-30000352	E CAPACITOR	100uF 16V M
C828	VE-30016654	CAPACITOR SMD	100nF 16V K R
C828	VE-30016654	CAPACITOR SMD	100nF 16V K R
C829	VE-30012582	CAPACITOR SMD	10nF 50V K R
C829	VE-30012582	CAPACITOR SMD	10nF 50V K R
C830	VE-30016654	CAPACITOR SMD	100nF 16V K R
C830	VE-30016654	CAPACITOR SMD	100nF 16V K R
C831	VE-30000371	E CAPACITOR	22uF 50V M
C831	VE-30000371	E CAPACITOR	22uF 50V M
C832	VE-30012562	CAPACITOR SMD	15pF 50V J
C832	VE-30012562	CAPACITOR SMD	15pF 50V J
C833	VE-30016654	CAPACITOR SMD	100nF 16V K R
C833	VE-30016654	CAPACITOR SMD	100nF 16V K R
C834	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C834	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C835	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C835	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C837	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C837	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C839	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C839	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C840	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C840	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C846	VE-30000407	E CAPACITOR	470uF 16V M
C846	VE-30000407	E CAPACITOR	470uF 16V M
C847	VE-30012569	CAPACITOR SMD	33pF 50V J
C847	VE-30012569	CAPACITOR SMD	33pF 50V J
C848	VE-30012569	CAPACITOR SMD	33pF 50V J
C848	VE-30012569	CAPACITOR SMD	33pF 50V J
C849	VE-30012574	CAPACITOR SMD	470pF 50V J
C849	VE-30012574	CAPACITOR SMD	470pF 50V J
C850	VE-30012569	CAPACITOR SMD	33pF 50V J
C850	VE-30012569	CAPACITOR SMD	33pF 50V J
C851	VE-30012574	CAPACITOR SMD	470pF 50V J
C851	VE-30012574	CAPACITOR SMD	470pF 50V J
C852	VE-30012574	CAPACITOR SMD	470pF 50V J
C852	VE-30012574	CAPACITOR SMD	470pF 50V J
C853	VE-30012574	CAPACITOR SMD	470pF 50V J
C853	VE-30012574	CAPACITOR SMD	470pF 50V J
C858	VE-30012569	CAPACITOR SMD	33pF 50V J
C858	VE-30012569	CAPACITOR SMD	33pF 50V J
C859	VE-30012569	CAPACITOR SMD	33pF 50V J
C859	VE-30012569	CAPACITOR SMD	33pF 50V J
C860	VE-30012569	CAPACITOR SMD	33pF 50V J
C860	VE-30012569	CAPACITOR SMD	33pF 50V J
C861	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C861	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C862	VE-30016654	CAPACITOR SMD	100nF 16V K R
C862	VE-30016654	CAPACITOR SMD	100nF 16V K R
C863	VE-30012581	CAPACITOR SMD	1nF 50V K R
C863	VE-30012581	CAPACITOR SMD	1nF 50V K R
C900	VE-30000354	E CAPACITOR	100uF 35V M
C900	VE-30000354	E CAPACITOR	100uF 35V M
C903	VE-30000354	E CAPACITOR	100uF 35V M
C903	VE-30000354	E CAPACITOR	100uF 35V M
C904	VE-30012582	CAPACITOR SMD	10nF 50V K R
C904	VE-30012582	CAPACITOR SMD	10nF 50V K R
C908	VE-30000359	E CAPACITOR	1000uF 16V M
C909	VE-30016654	CAPACITOR SMD	100nF 16V K R
C909	VE-30016654	CAPACITOR SMD	100nF 16V K R
C910	VE-30000354	E CAPACITOR	100uF 35V M
C910	VE-30000354	E CAPACITOR	100uF 35V M
C911	VE-30012582	CAPACITOR SMD	10nF 50V K R
C911	VE-30012582	CAPACITOR SMD	10nF 50V K R
C912	VE-30000359	E CAPACITOR	1000uF 16V M
C913	VE-30016654	CAPACITOR SMD	100nF 16V K R
C913	VE-30016654	CAPACITOR SMD	100nF 16V K R
C915	VE-30016654	CAPACITOR SMD	100nF 16V K R
C915	VE-30016654	CAPACITOR SMD	100nF 16V K R
C916	VE-30016654	CAPACITOR SMD	100nF 16V K R

⚠Ref No.	Part No.	Part Name	Description Local
C916	VE-30016654	CAPACITOR SMD	100nF 16V K R
C917	VE-30000371	E CAPACITOR	22uF 50V M
C917	VE-30000371	E CAPACITOR	22uF 50V M
C918	VE-30000371	E CAPACITOR	22uF 50V M
C918	VE-30000371	E CAPACITOR	22uF 50V M
C919	VE-30016654	CAPACITOR SMD	100nF 16V K R
C919	VE-30016654	CAPACITOR SMD	100nF 16V K R
C920	VE-30000354	E CAPACITOR	100uF 35V M
C920	VE-30000354	E CAPACITOR	100uF 35V M
C921	VE-30012582	CAPACITOR SMD	10nF 50V K R
C921	VE-30012582	CAPACITOR SMD	10nF 50V K R
C922	VE-30000359	E CAPACITOR	1000uF 16V M
C923	VE-30016654	CAPACITOR SMD	100nF 16V K R
C923	VE-30016654	CAPACITOR SMD	100nF 16V K R
C924	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C924	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C925	VE-30012560	CAPACITOR SMD	100pF 50V J
C925	VE-30012560	CAPACITOR SMD	100pF 50V J
C926	VE-30000371	E CAPACITOR	22uF 50V M
C926	VE-30000371	E CAPACITOR	22uF 50V M
C927	VE-30000294	CAPACITOR SMD	100nF 50V K
C927	VE-30000294	CAPACITOR SMD	100nF 50V K
C928	VE-30000345	E CAPACITOR	10uF 50V M
C928	VE-30000345	E CAPACITOR	10uF 50V M
C929	VE-30000294	CAPACITOR SMD	100nF 50V K
C929	VE-30000294	CAPACITOR SMD	100nF 50V K
C930	VE-30000371	E CAPACITOR	22uF 50V M
C930	VE-30000371	E CAPACITOR	22uF 50V M
C932	VE-30000294	CAPACITOR SMD	100nF 50V K
C932	VE-30000294	CAPACITOR SMD	100nF 50V K
C933	VE-30000294	CAPACITOR SMD	100nF 50V K
C933	VE-30000294	CAPACITOR SMD	100nF 50V K
C935	VE-30016654	CAPACITOR SMD	100nF 16V K R
C935	VE-30016654	CAPACITOR SMD	100nF 16V K R
C936	VE-30016654	CAPACITOR SMD	100nF 16V K R
C936	VE-30016654	CAPACITOR SMD	100nF 16V K R
C937	VE-30000371	E CAPACITOR	22uF 50V M
C937	VE-30000371	E CAPACITOR	22uF 50V M
C938	VE-30000352	E CAPACITOR	100uF 16V M
C938	VE-30000352	E CAPACITOR	100uF 16V M
C941	VE-30000294	CAPACITOR SMD	100nF 50V K
C941	VE-30000294	CAPACITOR SMD	100nF 50V K
R1	VE-30000689	RESISTOR CF	1/4W 3.9K J
R1	VE-30012510	RESISTOR SMD	1/16W 100R J
R2	VE-30000526	RESISTOR CF	1/4W 1.5K J
R3	VE-30000770	RESISTOR CF	1/4W 680R J
R4	VE-30000712	RESISTOR CF	1/4W 470R J
R5	VE-30000622	RESISTOR CF	1/4W 270R J
R100	VE-30012713	RESISTOR SMD	1/16W 75R J
R100	VE-30014128	RESISTOR SMD	1/16W 33R J
R100	VE-30012713	RESISTOR SMD	1/16W 75R J
R101	VE-30012713	RESISTOR SMD	1/16W 75R J
R101	VE-30014128	RESISTOR SMD	1/16W 33R J
R101	VE-30012713	RESISTOR SMD	1/16W 75R J
R102	VE-30012641	RESISTOR SMD	1/16W 10K J
R102	VE-30012713	RESISTOR SMD	1/16W 75R J
R102	VE-30012713	RESISTOR SMD	1/16W 75R J
R103	VE-30012641	RESISTOR SMD	1/16W 10K J
R103	VE-30012713	RESISTOR SMD	1/16W 75R J
R103	VE-30012713	RESISTOR SMD	1/16W 75R J
R104	VE-30000594	RESISTOR CF	1/4W 22K J
R104	VE-30012713	RESISTOR SMD	1/16W 75R J
R104	VE-30012713	RESISTOR SMD	1/16W 75R J
R105	VE-30000712	RESISTOR CF	1/4W 470R J
R105	VE-30012641	RESISTOR SMD	1/16W 10K J
R105	VE-30012641	RESISTOR SMD	1/16W 10K J
R106	VE-30000594	RESISTOR CF	1/4W 22K J
R106	VE-30012641	RESISTOR SMD	1/16W 10K J
R106	VE-30012641	RESISTOR SMD	1/16W 10K J
R107	VE-30000712	RESISTOR CF	1/4W 470R J
R107	VE-30012510	RESISTOR SMD	1/16W 100R J
R107	VE-30012510	RESISTOR SMD	1/16W 100R J
R108	VE-30000650	RESISTOR CF	1/4W 33R J
R108	VE-30012510	RESISTOR SMD	1/16W 100R J
R108	VE-30012510	RESISTOR SMD	1/16W 100R J
R109	VE-30000650	RESISTOR CF	1/4W 33R J
R109	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R109	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R110	VE-30000594	RESISTOR CF	1/4W 22K J
R110	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R110	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R111	VE-30000712	RESISTOR CF	1/4W 470R J
R111	VE-30012510	RESISTOR SMD	1/16W 100R J
R111	VE-30012510	RESISTOR SMD	1/16W 100R J
R112	VE-30000594	RESISTOR CF	1/4W 22K J
R113	VE-30000712	RESISTOR CF	1/4W 470R J

⚠Ref No.	Part No.	Part Name	Description Local
R114	VE-30000594	RESISTOR CF	1/4W 22K J
R115	VE-30000712	RESISTOR CF	1/4W 470R J
R121	VE-30012677	RESISTOR SMD	1/16W 3.3K J
R121	VE-30012677	RESISTOR SMD	1/16W 3.3K J
R122	VE-30012510	RESISTOR SMD	1/16W 100R J
R122	VE-30012510	RESISTOR SMD	1/16W 100R J
R123	VE-30012510	RESISTOR SMD	1/16W 100R J
R123	VE-30012510	RESISTOR SMD	1/16W 100R J
R127	VE-30012641	RESISTOR SMD	1/16W 10K J
R127	VE-30012641	RESISTOR SMD	1/16W 10K J
R128	VE-30012641	RESISTOR SMD	1/16W 10K J
R128	VE-30012641	RESISTOR SMD	1/16W 10K J
R130	VE-30030692	FERRITE NET	120R/100MHz 150mA
R130	VE-30030692	FERRITE NET	120R/100MHz 150mA
R131	VE-30030692	FERRITE NET	120R/100MHz 150mA
R131	VE-30030692	FERRITE NET	120R/100MHz 150mA
R132	VE-30030692	FERRITE NET	120R/100MHz 150mA
R132	VE-30030692	FERRITE NET	120R/100MHz 150mA
R133	VE-30030692	FERRITE NET	120R/100MHz 150mA
R133	VE-30030692	FERRITE NET	120R/100MHz 150mA
R134	VE-30030692	FERRITE NET	120R/100MHz 150mA
R134	VE-30030692	FERRITE NET	120R/100MHz 150mA
R135	VE-30030692	FERRITE NET	120R/100MHz 150mA
R135	VE-30030692	FERRITE NET	120R/100MHz 150mA
R136	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R136	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R137	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R137	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R138	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R138	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R139	VE-30012657	RESISTOR SMD	1/16W 1K J
R139	VE-30012657	RESISTOR SMD	1/16W 1K J
R141	VE-30012641	RESISTOR SMD	1/16W 10K J
R141	VE-30012641	RESISTOR SMD	1/16W 10K J
R142	VE-30012657	RESISTOR SMD	1/16W 1K J
R142	VE-30012657	RESISTOR SMD	1/16W 1K J
R143	VE-30012657	RESISTOR SMD	1/16W 1K J
R143	VE-30012657	RESISTOR SMD	1/16W 1K J
R145	VE-30012510	RESISTOR SMD	1/16W 100R J
R145	VE-30012510	RESISTOR SMD	1/16W 100R J
R146	VE-30012510	RESISTOR SMD	1/16W 100R J
R146	VE-30012510	RESISTOR SMD	1/16W 100R J
R147	VE-30012510	RESISTOR SMD	1/16W 100R J
R147	VE-30012510	RESISTOR SMD	1/16W 100R J
R148	VE-30012510	RESISTOR SMD	1/16W 100R J
R148	VE-30012510	RESISTOR SMD	1/16W 100R J
R149	VE-30012641	RESISTOR SMD	1/16W 10K J
R149	VE-30012641	RESISTOR SMD	1/16W 10K J
R150	VE-30012657	RESISTOR SMD	1/16W 1K J
R150	VE-30012657	RESISTOR SMD	1/16W 1K J
R151	VE-30012657	RESISTOR SMD	1/16W 1K J
R151	VE-30012657	RESISTOR SMD	1/16W 1K J
R152	VE-30012655	RESISTOR SMD	1/16W 180R J
R152	VE-30012655	RESISTOR SMD	1/16W 180R J
R156	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R156	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R157	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R157	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R158	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R158	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R159	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R159	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R160	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R160	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R161	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R161	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R162	VE-30012509	RESISTOR SMD	1/16W 100K J
R162	VE-30012509	RESISTOR SMD	1/16W 100K J
R165	VE-30025836	FERRITE NET	240R/100MHz 150mA
R165	VE-30025836	FERRITE NET	240R/100MHz 150mA
R166	VE-30025836	FERRITE NET	240R/100MHz 150mA
R166	VE-30025836	FERRITE NET	240R/100MHz 150mA
R167	VE-30020529	FERRITE SMD	120R/100MHz 200mA
R167	VE-30020529	FERRITE SMD	120R/100MHz 200mA
R168	VE-30012641	RESISTOR SMD	1/16W 10K J
R168	VE-30012641	RESISTOR SMD	1/16W 10K J
R169	VE-30012641	RESISTOR SMD	1/16W 10K J
R169	VE-30012641	RESISTOR SMD	1/16W 10K J
R170	VE-30012641	RESISTOR SMD	1/16W 10K J
R170	VE-30012641	RESISTOR SMD	1/16W 10K J
R172	VE-30012641	RESISTOR SMD	1/16W 10K J
R172	VE-30012641	RESISTOR SMD	1/16W 10K J
R173	VE-30012641	RESISTOR SMD	1/16W 10K J
R173	VE-30012641	RESISTOR SMD	1/16W 10K J
R174	VE-30012641	RESISTOR SMD	1/16W 10K J
R174	VE-30012641	RESISTOR SMD	1/16W 10K J
R175	VE-30012641	RESISTOR SMD	1/16W 10K J

⚠Ref No.	Part No.	Part Name	Description Local
R175	VE-30012641	RESISTOR SMD	1/16W 10K J
R176	VE-30012641	RESISTOR SMD	1/16W 10K J
R176	VE-30012641	RESISTOR SMD	1/16W 10K J
R177	VE-30012641	RESISTOR SMD	1/16W 10K J
R177	VE-30012641	RESISTOR SMD	1/16W 10K J
R178	VE-30012641	RESISTOR SMD	1/16W 10K J
R178	VE-30012641	RESISTOR SMD	1/16W 10K J
R179	VE-30012641	RESISTOR SMD	1/16W 10K J
R179	VE-30012641	RESISTOR SMD	1/16W 10K J
R180	VE-30012641	RESISTOR SMD	1/16W 10K J
R180	VE-30012641	RESISTOR SMD	1/16W 10K J
R181	VE-30012641	RESISTOR SMD	1/16W 10K J
R181	VE-30012641	RESISTOR SMD	1/16W 10K J
R182	VE-30012641	RESISTOR SMD	1/16W 10K J
R182	VE-30012641	RESISTOR SMD	1/16W 10K J
R183	VE-30012657	RESISTOR SMD	1/16W 1K J
R183	VE-30012657	RESISTOR SMD	1/16W 1K J
R184	VE-30012657	RESISTOR SMD	1/16W 1K J
R184	VE-30012657	RESISTOR SMD	1/16W 1K J
R185	VE-30012641	RESISTOR SMD	1/16W 10K J
R185	VE-30012641	RESISTOR SMD	1/16W 10K J
R189	VE-30012657	RESISTOR SMD	1/16W 1K J
R189	VE-30012657	RESISTOR SMD	1/16W 1K J
R197	VE-30022083	RESISTOR SMD	1/16W 330R J
R197	VE-30022083	RESISTOR SMD	1/16W 330R J
R300	VE-30012657	RESISTOR SMD	1/16W 1K J
R300	VE-30012657	RESISTOR SMD	1/16W 1K J
R301	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R301	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R302	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R302	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R303	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R303	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R304	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R304	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R305	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R305	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R306	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R306	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R307	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R307	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R308	VE-30012657	RESISTOR SMD	1/16W 1K J
R308	VE-30012657	RESISTOR SMD	1/16W 1K J
R309	VE-30012669	RESISTOR SMD	1/16W 22K J
R309	VE-30012669	RESISTOR SMD	1/16W 22K J
R310	VE-30012510	RESISTOR SMD	1/16W 100R J
R310	VE-30012510	RESISTOR SMD	1/16W 100R J
R311	VE-30012510	RESISTOR SMD	1/16W 100R J
R311	VE-30012510	RESISTOR SMD	1/16W 100R J
R312	VE-30012510	RESISTOR SMD	1/16W 100R J
R312	VE-30012510	RESISTOR SMD	1/16W 100R J
R313	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R313	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R314	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R314	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R315	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R315	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R316	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R316	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R317	VE-30012650	RESISTOR SMD	1/16W 15K J
R317	VE-30012650	RESISTOR SMD	1/16W 15K J
R318	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R318	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R319	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R319	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R320	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R320	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R321	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R321	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R322	VE-30012695	RESISTOR SMD	1/16W 470R J
R322	VE-30012695	RESISTOR SMD	1/16W 470R J
R323	VE-30012987	RESISTOR SMD	1/16W 56R J
R323	VE-30012987	RESISTOR SMD	1/16W 56R J
R324	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R324	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R325	VE-30012695	RESISTOR SMD	1/16W 470R J
R325	VE-30012695	RESISTOR SMD	1/16W 470R J
R326	VE-30012695	RESISTOR SMD	1/16W 470R J
R326	VE-30012695	RESISTOR SMD	1/16W 470R J
R327	VE-30012695	RESISTOR SMD	1/16W 470R J
R327	VE-30012695	RESISTOR SMD	1/16W 470R J
R328	VE-30012696	RESISTOR SMD	1/16W 47K J
R328	VE-30012696	RESISTOR SMD	1/16W 47K J
R329	VE-30012696	RESISTOR SMD	1/16W 47K J
R329	VE-30012696	RESISTOR SMD	1/16W 47K J
R330	VE-30012696	RESISTOR SMD	1/16W 47K J
R330	VE-30012696	RESISTOR SMD	1/16W 47K J

⚠Ref No.	Part No.	Part Name	Description Local
R331	VE-30012696	RESISTOR SMD	1/16W 47K J
R331	VE-30012696	RESISTOR SMD	1/16W 47K J
R332	VE-30012510	RESISTOR SMD	1/16W 100R J
R332	VE-30012510	RESISTOR SMD	1/16W 100R J
R333	VE-30012510	RESISTOR SMD	1/16W 100R J
R333	VE-30012510	RESISTOR SMD	1/16W 100R J
R334	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R334	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R335	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R335	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R336	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R336	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R337	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R337	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R339	VE-30012509	RESISTOR SMD	1/16W 100K J
R339	VE-30012509	RESISTOR SMD	1/16W 100K J
R340	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R340	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R341	VE-30012644	RESISTOR SMD	1/16W 12K J
R341	VE-30012644	RESISTOR SMD	1/16W 12K J
R342	VE-30012668	RESISTOR SMD	1/16W 220R J
R342	VE-30012668	RESISTOR SMD	1/16W 220R J
R343	VE-30012668	RESISTOR SMD	1/16W 220R J
R343	VE-30012668	RESISTOR SMD	1/16W 220R J
R344	VE-30012657	RESISTOR SMD	1/16W 1K J
R344	VE-30012657	RESISTOR SMD	1/16W 1K J
R347	VE-30014022	RESISTOR SMD	1/16W 47R J
R347	VE-30014022	RESISTOR SMD	1/16W 47R J
R348	VE-30012655	RESISTOR SMD	1/16W 180R J
R348	VE-30012655	RESISTOR SMD	1/16W 180R J
R349	VE-30014022	RESISTOR SMD	1/16W 47R J
R349	VE-30014022	RESISTOR SMD	1/16W 47R J
R353	VE-30012641	RESISTOR SMD	1/16W 10K J
R353	VE-30012641	RESISTOR SMD	1/16W 10K J
R354	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R354	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R355	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R355	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R357	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R357	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R358	VE-30012695	RESISTOR SMD	1/16W 470R J
R358	VE-30012695	RESISTOR SMD	1/16W 470R J
R359	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R359	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R360	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R360	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R361	VE-30012657	RESISTOR SMD	1/16W 1K J
R361	VE-30012657	RESISTOR SMD	1/16W 1K J
R368	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R368	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R369	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R369	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R370	VE-30012669	RESISTOR SMD	1/16W 22K J
R370	VE-30012669	RESISTOR SMD	1/16W 22K J
R371	VE-30012657	RESISTOR SMD	1/16W 1K J
R371	VE-30012657	RESISTOR SMD	1/16W 1K J
R374	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R374	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R376	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R376	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R378	VE-30012684	RESISTOR SMD	1/16W 330R J
R378	VE-30012684	RESISTOR SMD	1/16W 330R J
R379	VE-30012510	RESISTOR SMD	1/16W 100R J
R379	VE-30012510	RESISTOR SMD	1/16W 100R J
R380	VE-30012669	RESISTOR SMD	1/16W 22K J
R380	VE-30012669	RESISTOR SMD	1/16W 22K J
R381	VE-30012657	RESISTOR SMD	1/16W 1K J
R381	VE-30012657	RESISTOR SMD	1/16W 1K J
R383	VE-30012650	RESISTOR SMD	1/16W 15K J
R383	VE-30012650	RESISTOR SMD	1/16W 15K J
R384	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R384	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R385	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R385	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R386	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R386	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R387	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R387	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R388	VE-30012641	RESISTOR SMD	1/16W 10K J
R388	VE-30012641	RESISTOR SMD	1/16W 10K J
R389	VE-30012641	RESISTOR SMD	1/16W 10K J
R389	VE-30012641	RESISTOR SMD	1/16W 10K J
R390	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R390	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R391	VE-30012696	RESISTOR SMD	1/16W 47K J
R391	VE-30012696	RESISTOR SMD	1/16W 47K J
R392	VE-30012696	RESISTOR SMD	1/16W 47K J
R392	VE-30012696	RESISTOR SMD	1/16W 47K J
R393	VE-30012510	RESISTOR SMD	1/16W 100R J
R393	VE-30012510	RESISTOR SMD	1/16W 100R J
R394	VE-30012641	RESISTOR SMD	1/16W 10K J
R394	VE-30012641	RESISTOR SMD	1/16W 10K J
R395	VE-30012684	RESISTOR SMD	1/16W 330R J
R395	VE-30012684	RESISTOR SMD	1/16W 330R J
R396	VE-30012684	RESISTOR SMD	1/16W 330R J
R396	VE-30012684	RESISTOR SMD	1/16W 330R J
R397	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R397	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R399	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R399	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R400	VE-30012713	RESISTOR SMD	1/16W 75R J
R400	VE-30012713	RESISTOR SMD	1/16W 75R J
R401	VE-30012713	RESISTOR SMD	1/16W 75R J
R401	VE-30012713	RESISTOR SMD	1/16W 75R J
R402	VE-30012713	RESISTOR SMD	1/16W 75R J
R402	VE-30012713	RESISTOR SMD	1/16W 75R J
R404	VE-30012713	RESISTOR SMD	1/16W 75R J
R404	VE-30012713	RESISTOR SMD	1/16W 75R J
R405	VE-30012713	RESISTOR SMD	1/16W 75R J
R405	VE-30012713	RESISTOR SMD	1/16W 75R J
R406	VE-30012713	RESISTOR SMD	1/16W 75R J
R406	VE-30012713	RESISTOR SMD	1/16W 75R J
R407	VE-30012510	RESISTOR SMD	1/16W 100R J
R407	VE-30012510	RESISTOR SMD	1/16W 100R J
R408	VE-30012510	RESISTOR SMD	1/16W 100R J
R408	VE-30012510	RESISTOR SMD	1/16W 100R J
R409	VE-30012713	RESISTOR SMD	1/16W 75R J
R409	VE-30012713	RESISTOR SMD	1/16W 75R J
R410	VE-30012644	RESISTOR SMD	1/16W 12K J
R410	VE-30012644	RESISTOR SMD	1/16W 12K J
R411	VE-30012669	RESISTOR SMD	1/16W 22K J
R411	VE-30012669	RESISTOR SMD	1/16W 22K J
R412	VE-30014078	RESISTOR SMD	1/16W 22R J
R412	VE-30014078	RESISTOR SMD	1/16W 22R J
R413	VE-30012657	RESISTOR SMD	1/16W 1K J
R413	VE-30012657	RESISTOR SMD	1/16W 1K J
R414	VE-30012713	RESISTOR SMD	1/16W 75R J
R414	VE-30012713	RESISTOR SMD	1/16W 75R J
R415	VE-30012510	RESISTOR SMD	1/16W 100R J
R415	VE-30012510	RESISTOR SMD	1/16W 100R J
R416	VE-30018254	RESISTOR SARRAY	1/16W 10R J
R416	VE-30018254	RESISTOR SARRAY	1/16W 10R J
R417	VE-30018254	RESISTOR SARRAY	1/16W 10R J
R417	VE-30018254	RESISTOR SARRAY	1/16W 10R J
R418	VE-30014078	RESISTOR SMD	1/16W 22R J
R418	VE-30014078	RESISTOR SMD	1/16W 22R J
R425	VE-30012695	RESISTOR SMD	1/16W 470R J
R425	VE-30012695	RESISTOR SMD	1/16W 470R J
R426	VE-30012695	RESISTOR SMD	1/16W 470R J
R426	VE-30012695	RESISTOR SMD	1/16W 470R J
R427	VE-30012695	RESISTOR SMD	1/16W 470R J
R427	VE-30012695	RESISTOR SMD	1/16W 470R J
R431	VE-30012657	RESISTOR SMD	1/16W 1K J
R431	VE-30012657	RESISTOR SMD	1/16W 1K J
R432	VE-30012657	RESISTOR SMD	1/16W 1K J
R432	VE-30012657	RESISTOR SMD	1/16W 1K J
R434	VE-30012657	RESISTOR SMD	1/16W 1K J
R434	VE-30012657	RESISTOR SMD	1/16W 1K J
R437	VE-30012713	RESISTOR SMD	1/16W 75R J
R437	VE-30012713	RESISTOR SMD	1/16W 75R J
R438	VE-30012713	RESISTOR SMD	1/16W 75R J
R438	VE-30012713	RESISTOR SMD	1/16W 75R J
R439	VE-30012713	RESISTOR SMD	1/16W 75R J
R439	VE-30012713	RESISTOR SMD	1/16W 75R J
R450	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R450	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R454	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R454	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R456	VE-30012510	RESISTOR SMD	1/16W 100R J
R456	VE-30012510	RESISTOR SMD	1/16W 100R J
R457	VE-30012510	RESISTOR SMD	1/16W 100R J
R457	VE-30012510	RESISTOR SMD	1/16W 100R J
R503	VE-30012510	RESISTOR SMD	1/16W 100R J
R503	VE-30012510	RESISTOR SMD	1/16W 100R J
R504	VE-30012510	RESISTOR SMD	1/16W 100R J
R504	VE-30012510	RESISTOR SMD	1/16W 100R J
R505	VE-30012510	RESISTOR SMD	1/16W 100R J
R505	VE-30012510	RESISTOR SMD	1/16W 100R J
R506	VE-30012510	RESISTOR SMD	1/16W 100R J
R506	VE-30012510	RESISTOR SMD	1/16W 100R J
R507	VE-30012698	RESISTOR SMD	1/16W 5.6K J
R507	VE-30012698	RESISTOR SMD	1/16W 5.6K J
R508	VE-30012510	RESISTOR SMD	1/16W 100R J
R508	VE-30012510	RESISTOR SMD	1/16W 100R J

⚠Ref No.	Part No.	Part Name	Description	Local
R509	VE-30012641	RESISTOR SMD	1/16W 10K J	
R509	VE-30012641	RESISTOR SMD	1/16W 10K J	
R510	VE-30012644	RESISTOR SMD	1/16W 12K J	
R510	VE-30012644	RESISTOR SMD	1/16W 12K J	
R511	VE-30012696	RESISTOR SMD	1/16W 47K J	
R511	VE-30012696	RESISTOR SMD	1/16W 47K J	
R512	VE-30012684	RESISTOR SMD	1/16W 330R J	
R512	VE-30012684	RESISTOR SMD	1/16W 330R J	
R513	VE-30012713	RESISTOR SMD	1/16W 75R J	
R513	VE-30012713	RESISTOR SMD	1/16W 75R J	
R514	VE-30012669	RESISTOR SMD	1/16W 22K J	
R514	VE-30012669	RESISTOR SMD	1/16W 22K J	
R515	VE-30012669	RESISTOR SMD	1/16W 22K J	
R515	VE-30012669	RESISTOR SMD	1/16W 22K J	
R516	VE-30012695	RESISTOR SMD	1/16W 470R J	
R516	VE-30012695	RESISTOR SMD	1/16W 470R J	
R517	VE-30012659	RESISTOR SMD	1/16W 2.2K J	
R517	VE-30012659	RESISTOR SMD	1/16W 2.2K J	
R518	VE-30012510	RESISTOR SMD	1/16W 100R J	
R518	VE-30012510	RESISTOR SMD	1/16W 100R J	
R527	VE-30012705	RESISTOR SMD	1/16W 6.8K J	
R527	VE-30012705	RESISTOR SMD	1/16W 6.8K J	
R528	VE-30012574	CAPACITOR SMD	470pF 50V J	
R528	VE-30012574	CAPACITOR SMD	470pF 50V J	
R529	VE-30012982	RESISTOR SMD	1/16W 10R J	
R529	VE-30012982	RESISTOR SMD	1/16W 10R J	
R600	VE-30012713	RESISTOR SMD	1/16W 75R J	
R600	VE-30012713	RESISTOR SMD	1/16W 75R J	
R601	VE-30012713	RESISTOR SMD	1/16W 75R J	
R601	VE-30012713	RESISTOR SMD	1/16W 75R J	
R602	VE-30012510	RESISTOR SMD	1/16W 100R J	
R602	VE-30012510	RESISTOR SMD	1/16W 100R J	
R603	VE-30012510	RESISTOR SMD	1/16W 100R J	
R603	VE-30012510	RESISTOR SMD	1/16W 100R J	
R604	VE-30012982	RESISTOR SMD	1/16W 10R J	
R604	VE-30012982	RESISTOR SMD	1/16W 10R J	
R605	VE-30012695	RESISTOR SMD	1/16W 470R J	
R605	VE-30012695	RESISTOR SMD	1/16W 470R J	
R606	VE-30012641	RESISTOR SMD	1/16W 10K J	
R606	VE-30012641	RESISTOR SMD	1/16W 10K J	
R607	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R607	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R608	VE-30012713	RESISTOR SMD	1/16W 75R J	
R608	VE-30012713	RESISTOR SMD	1/16W 75R J	
R609	VE-30012982	RESISTOR SMD	1/16W 10R J	
R609	VE-30012982	RESISTOR SMD	1/16W 10R J	
R610	VE-30012695	RESISTOR SMD	1/16W 470R J	
R610	VE-30012695	RESISTOR SMD	1/16W 470R J	
R611	VE-30012641	RESISTOR SMD	1/16W 10K J	
R611	VE-30012641	RESISTOR SMD	1/16W 10K J	
R612	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R612	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R613	VE-30012713	RESISTOR SMD	1/16W 75R J	
R613	VE-30012713	RESISTOR SMD	1/16W 75R J	
R614	VE-30000797	RESISTOR SMD	1/10W 75R J	
R614	VE-30000797	RESISTOR SMD	1/10W 75R J	
R615	VE-30012713	RESISTOR SMD	1/16W 75R J	
R615	VE-30012713	RESISTOR SMD	1/16W 75R J	
R617	VE-30012713	RESISTOR SMD	1/16W 75R J	
R617	VE-30012713	RESISTOR SMD	1/16W 75R J	
R618	VE-30012982	RESISTOR SMD	1/16W 10R J	
R618	VE-30012982	RESISTOR SMD	1/16W 10R J	
R619	VE-30012695	RESISTOR SMD	1/16W 470R J	
R619	VE-30012695	RESISTOR SMD	1/16W 470R J	
R620	VE-30012641	RESISTOR SMD	1/16W 10K J	
R620	VE-30012641	RESISTOR SMD	1/16W 10K J	
R621	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R621	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R622	VE-30012713	RESISTOR SMD	1/16W 75R J	
R622	VE-30012713	RESISTOR SMD	1/16W 75R J	
R623	VE-30012713	RESISTOR SMD	1/16W 75R J	
R623	VE-30012713	RESISTOR SMD	1/16W 75R J	
R625	VE-30012982	RESISTOR SMD	1/16W 10R J	
R625	VE-30012982	RESISTOR SMD	1/16W 10R J	
R626	VE-30012695	RESISTOR SMD	1/16W 470R J	
R626	VE-30012695	RESISTOR SMD	1/16W 470R J	
R627	VE-30012641	RESISTOR SMD	1/16W 10K J	
R627	VE-30012641	RESISTOR SMD	1/16W 10K J	
R628	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R628	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R629	VE-30012713	RESISTOR SMD	1/16W 75R J	
R629	VE-30012713	RESISTOR SMD	1/16W 75R J	
R630	VE-30000797	RESISTOR SMD	1/10W 75R J	
R630	VE-30000797	RESISTOR SMD	1/10W 75R J	
R631	VE-30012713	RESISTOR SMD	1/16W 75R J	
R631	VE-30012713	RESISTOR SMD	1/16W 75R J	
R632	VE-30012509	RESISTOR SMD	1/16W 100K J	
R632	VE-30012509	RESISTOR SMD	1/16W 100K J	
R633	VE-30012509	RESISTOR SMD	1/16W 100K J	
R633	VE-30012509	RESISTOR SMD	1/16W 100K J	
R634	VE-30012509	RESISTOR SMD	1/16W 100K J	
R634	VE-30012509	RESISTOR SMD	1/16W 100K J	
R635	VE-30012509	RESISTOR SMD	1/16W 100K J	
R635	VE-30012509	RESISTOR SMD	1/16W 100K J	
R636	VE-30012509	RESISTOR SMD	1/16W 100K J	
R636	VE-30012509	RESISTOR SMD	1/16W 100K J	
R637	VE-30012509	RESISTOR SMD	1/16W 100K J	
R637	VE-30012509	RESISTOR SMD	1/16W 100K J	
R700	VE-30012641	RESISTOR SMD	1/16W 10K J	
R700	VE-30012641	RESISTOR SMD	1/16W 10K J	
R701	VE-30012641	RESISTOR SMD	1/16W 10K J	
R701	VE-30012641	RESISTOR SMD	1/16W 10K J	
R702	VE-30012510	RESISTOR SMD	1/16W 100R J	
R702	VE-30012510	RESISTOR SMD	1/16W 100R J	
R703	VE-30012510	RESISTOR SMD	1/16W 100R J	
R703	VE-30012510	RESISTOR SMD	1/16W 100R J	
R704	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R704	VE-30012692	RESISTOR SMD	1/16W 4.7K J	
R705	VE-30012712	RESISTOR SMD	1/16W 8.2K J	
R705	VE-30012712	RESISTOR SMD	1/16W 8.2K J	
R706	VE-30012641	RESISTOR SMD	1/16W 10K J	
R706	VE-30012641	RESISTOR SMD	1/16W 10K J	
R707	VE-30012712	RESISTOR SMD	1/16W 8.2K J	
R707	VE-30012712	RESISTOR SMD	1/16W 8.2K J	
R708	VE-30012665	RESISTOR SMD	1/16W 20K J	
R708	VE-30012665	RESISTOR SMD	1/16W 20K J	
R709	VE-30012665	RESISTOR SMD	1/16W 20K J	
R709	VE-30012665	RESISTOR SMD	1/16W 20K J	
R710	VE-30012641	RESISTOR SMD	1/16W 10K J	
R710	VE-30012641	RESISTOR SMD	1/16W 10K J	
R711	VE-30012510	RESISTOR SMD	1/16W 100R J	
R711	VE-30012510	RESISTOR SMD	1/16W 100R J	
R712	VE-30012657	RESISTOR SMD	1/16W 1K J	
R712	VE-30012657	RESISTOR SMD	1/16W 1K J	
R713	VE-30012657	RESISTOR SMD	1/16W 1K J	
R713	VE-30012657	RESISTOR SMD	1/16W 1K J	
R714	VE-30012702	RESISTOR SMD	1/16W 560R J	
R714	VE-30012702	RESISTOR SMD	1/16W 560R J	
R715	VE-30012702	RESISTOR SMD	1/16W 560R J	
R715	VE-30012702	RESISTOR SMD	1/16W 560R J	
R716	VE-30012702	RESISTOR SMD	1/16W 560R J	
R716	VE-30012702	RESISTOR SMD	1/16W 560R J	
R717	VE-30012702	RESISTOR SMD	1/16W 560R J	
R717	VE-30012702	RESISTOR SMD	1/16W 560R J	
R718	VE-30012657	RESISTOR SMD	1/16W 1K J	
R718	VE-30012657	RESISTOR SMD	1/16W 1K J	
R719	VE-30012657	RESISTOR SMD	1/16W 1K J	
R719	VE-30012657	RESISTOR SMD	1/16W 1K J	
R723	VE-30012713	RESISTOR SMD	1/16W 75R J	
R723	VE-30012713	RESISTOR SMD	1/16W 75R J	
R724	VE-30012713	RESISTOR SMD	1/16W 75R J	
R724	VE-30012713	RESISTOR SMD	1/16W 75R J	
R725	VE-30012713	RESISTOR SMD	1/16W 75R J	
R725	VE-30012713	RESISTOR SMD	1/16W 75R J	
R726	VE-30012657	RESISTOR SMD	1/16W 1K J	
R726	VE-30012657	RESISTOR SMD	1/16W 1K J	
R727	VE-30012657	RESISTOR SMD	1/16W 1K J	
R727	VE-30012657	RESISTOR SMD	1/16W 1K J	
R729	VE-30012713	RESISTOR SMD	1/16W 75R J	
R729	VE-30012713	RESISTOR SMD	1/16W 75R J	
R731	VE-30012713	RESISTOR SMD	1/16W 75R J	
R731	VE-30012713	RESISTOR SMD	1/16W 75R J	
R732	VE-30012713	RESISTOR SMD	1/16W 75R J	
R732	VE-30012713	RESISTOR SMD	1/16W 75R J	
R734	VE-30012510	RESISTOR SMD	1/16W 100R J	
R734	VE-30012510	RESISTOR SMD	1/16W 100R J	
R735	VE-30012510	RESISTOR SMD	1/16W 100R J	
R735	VE-30012510	RESISTOR SMD	1/16W 100R J	
R736	VE-30012657	RESISTOR SMD	1/16W 1K J	
R736	VE-30012657	RESISTOR SMD	1/16W 1K J	
R737	VE-30012657	RESISTOR SMD	1/16W 1K J	
R737	VE-30012657	RESISTOR SMD	1/16W 1K J	
R738	VE-30012657	RESISTOR SMD	1/16W 1K J	
R738	VE-30012657	RESISTOR SMD	1/16W 1K J	
R739	VE-30012657	RESISTOR SMD	1/16W 1K J	
R739	VE-30012657	RESISTOR SMD	1/16W 1K J	
R740	VE-30012657	RESISTOR SMD	1/16W 1K J	
R740	VE-30012657	RESISTOR SMD	1/16W 1K J	
R741	VE-30012657	RESISTOR SMD	1/16W 1K J	
R741	VE-30012657	RESISTOR SMD	1/16W 1K J	
R742	VE-30012642	RESISTOR SMD	1/16W 120K J	
R742	VE-30012642	RESISTOR SMD	1/16W 120K J	
R743	VE-30012644	RESISTOR SMD	1/16W 12K J	
R743	VE-30012644	RESISTOR SMD	1/16W 12K J	

⚠Ref No.	Part No.	Part Name	Description Local
R744	VE-30012696	RESISTOR SMD	1/16W 47K J
R744	VE-30012696	RESISTOR SMD	1/16W 47K J
R745	VE-30012689	RESISTOR SMD	1/16W 39K J
R745	VE-30012689	RESISTOR SMD	1/16W 39K J
R746	VE-30012674	RESISTOR SMD	1/16W 27K J
R746	VE-30012674	RESISTOR SMD	1/16W 27K J
R747	VE-30012713	RESISTOR SMD	1/16W 75R J
R747	VE-30012713	RESISTOR SMD	1/16W 75R J
R748	VE-30012713	RESISTOR SMD	1/16W 75R J
R748	VE-30012713	RESISTOR SMD	1/16W 75R J
R749	VE-30012668	RESISTOR SMD	1/16W 220R J
R749	VE-30012668	RESISTOR SMD	1/16W 220R J
R751	VE-30012510	RESISTOR SMD	1/16W 100R J
R751	VE-30012510	RESISTOR SMD	1/16W 100R J
R752	VE-30012657	RESISTOR SMD	1/16W 1K J
R752	VE-30012657	RESISTOR SMD	1/16W 1K J
R753	VE-30012641	RESISTOR SMD	1/16W 10K J
R753	VE-30012641	RESISTOR SMD	1/16W 10K J
R754	VE-30012641	RESISTOR SMD	1/16W 10K J
R754	VE-30012641	RESISTOR SMD	1/16W 10K J
R756	VE-30012641	RESISTOR SMD	1/16W 10K J
R756	VE-30012641	RESISTOR SMD	1/16W 10K J
R757	VE-30012641	RESISTOR SMD	1/16W 10K J
R757	VE-30012641	RESISTOR SMD	1/16W 10K J
R759	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R759	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R760	VE-30012641	RESISTOR SMD	1/16W 10K J
R760	VE-30012641	RESISTOR SMD	1/16W 10K J
R761	VE-30000464	RESISTOR SMD	1/10W 100R J
R761	VE-30000464	RESISTOR SMD	1/10W 100R J
R762	VE-30012713	RESISTOR SMD	1/16W 75R J
R762	VE-30012713	RESISTOR SMD	1/16W 75R J
R763	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R763	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R764	VE-30012657	RESISTOR SMD	1/16W 1K J
R764	VE-30012657	RESISTOR SMD	1/16W 1K J
R765	VE-30012641	RESISTOR SMD	1/16W 10K J
R765	VE-30012641	RESISTOR SMD	1/16W 10K J
R766	VE-30012509	RESISTOR SMD	1/16W 100K J
R766	VE-30012509	RESISTOR SMD	1/16W 100K J
R767	VE-30012509	RESISTOR SMD	1/16W 100K J
R767	VE-30012509	RESISTOR SMD	1/16W 100K J
R768	VE-30012509	RESISTOR SMD	1/16W 100K J
R768	VE-30012509	RESISTOR SMD	1/16W 100K J
R769	VE-30012509	RESISTOR SMD	1/16W 100K J
R769	VE-30012509	RESISTOR SMD	1/16W 100K J
R770	VE-30012641	RESISTOR SMD	1/16W 10K J
R770	VE-30012641	RESISTOR SMD	1/16W 10K J
R771	VE-30012641	RESISTOR SMD	1/16W 10K J
R771	VE-30012641	RESISTOR SMD	1/16W 10K J
R778	VE-30012641	RESISTOR SMD	1/16W 10K J
R778	VE-30012641	RESISTOR SMD	1/16W 10K J
R779	VE-30012509	RESISTOR SMD	1/16W 100K J
R779	VE-30012509	RESISTOR SMD	1/16W 100K J
R780	VE-30012669	RESISTOR SMD	1/16W 22K J
R780	VE-30012669	RESISTOR SMD	1/16W 22K J
R784	VE-30000464	RESISTOR SMD	1/10W 100R J
R784	VE-30000464	RESISTOR SMD	1/10W 100R J
R785	VE-30001969	FERRITE SMD	120R/100MHz 200mA
R785	VE-30001969	FERRITE SMD	120R/100MHz 200mA
R786	VE-30012713	RESISTOR SMD	1/16W 75R J
R786	VE-30012713	RESISTOR SMD	1/16W 75R J
R787	VE-30012713	RESISTOR SMD	1/16W 75R J
R787	VE-30012713	RESISTOR SMD	1/16W 75R J
R788	VE-30012657	RESISTOR SMD	1/16W 1K J
R788	VE-30012657	RESISTOR SMD	1/16W 1K J
R800	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R800	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R801	VE-30014128	RESISTOR SMD	1/16W 33R J
R801	VE-30014128	RESISTOR SMD	1/16W 33R J
R901	VE-30012641	RESISTOR SMD	1/16W 10K J
R901	VE-30012641	RESISTOR SMD	1/16W 10K J
R902	VE-30012509	RESISTOR SMD	1/16W 100K J
R902	VE-30012509	RESISTOR SMD	1/16W 100K J
R903	VE-30012641	RESISTOR SMD	1/16W 10K J
R903	VE-30012641	RESISTOR SMD	1/16W 10K J
R904	VE-30012641	RESISTOR SMD	1/16W 10K J
R904	VE-30012641	RESISTOR SMD	1/16W 10K J
R907	VE-30012510	RESISTOR SMD	1/16W 100R J
R907	VE-30012510	RESISTOR SMD	1/16W 100R J
R908	VE-30012510	RESISTOR SMD	1/16W 100R J
R908	VE-30012510	RESISTOR SMD	1/16W 100R J
R909	VE-30012677	RESISTOR SMD	1/16W 3.3K J
R909	VE-30012677	RESISTOR SMD	1/16W 3.3K J
R910	VE-30012510	RESISTOR SMD	1/16W 100R J
R910	VE-30012510	RESISTOR SMD	1/16W 100R J
R911	VE-30012510	RESISTOR SMD	1/16W 100R J
R911	VE-30012510	RESISTOR SMD	1/16W 100R J
R912	VE-30012655	RESISTOR SMD	1/16W 180R J
R912	VE-30012655	RESISTOR SMD	1/16W 180R J
R913	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R913	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R915	VE-30012703	RESISTOR SMD	1/16W 56K J
R915	VE-30012703	RESISTOR SMD	1/16W 56K J
R916	VE-30000833	RESISTOR SMD	1/10W 91R J
R916	VE-30000833	RESISTOR SMD	1/10W 91R J
R917	VE-30000833	RESISTOR SMD	1/10W 91R J
R917	VE-30000833	RESISTOR SMD	1/10W 91R J
R918	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R918	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R919	VE-30000833	RESISTOR SMD	1/10W 91R J
R919	VE-30000833	RESISTOR SMD	1/10W 91R J
R920	VE-30000717	RESISTOR SMD	1/10W 470R J
R920	VE-30000717	RESISTOR SMD	1/10W 470R J
R921	VE-30006462	RESISTOR SMD	1/10W 22R J
R921	VE-30006462	RESISTOR SMD	1/10W 22R J
R922	VE-30012641	RESISTOR SMD	1/16W 10K J
R922	VE-30012641	RESISTOR SMD	1/16W 10K J
R923	VE-30012641	RESISTOR SMD	1/16W 10K J
R923	VE-30012641	RESISTOR SMD	1/16W 10K J
R924	VE-30012641	RESISTOR SMD	1/16W 10K J
R924	VE-30012641	RESISTOR SMD	1/16W 10K J
R925	VE-30012641	RESISTOR SMD	1/16W 10K J
R925	VE-30012641	RESISTOR SMD	1/16W 10K J
R926	VE-30012641	RESISTOR SMD	1/16W 10K J
R926	VE-30012641	RESISTOR SMD	1/16W 10K J
R927	VE-30012641	RESISTOR SMD	1/16W 10K J
R927	VE-30012641	RESISTOR SMD	1/16W 10K J
R928	VE-30012641	RESISTOR SMD	1/16W 10K J
R928	VE-30012641	RESISTOR SMD	1/16W 10K J
L100	VE-30001996	FIXED COIL	22uH Q40 K
L101	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L101	VE-30001996	FIXED COIL	22uH Q40 K
L101	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L102	VE-30001979	FIXED COIL	1uH Q45 M-A
L103	VE-30001979	FIXED COIL	1uH Q45 M-A
L104	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L104	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L105	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L105	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L109	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L109	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L110	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L110	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L111	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L111	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L113	VE-30020896	FERRITE SMD	120R/100MHz 200mA
L113	VE-30020896	FERRITE SMD	120R/100MHz 200mA
L300	VE-30017143	FIXED COIL SMD	22uH J Q25 125mA
L300	VE-30017143	FIXED COIL SMD	22uH J Q25 125mA
L301	VE-30018093	FIXED COIL SMD	3.3uH J Q30 185mA
L301	VE-30018093	FIXED COIL SMD	3.3uH J Q30 185mA
L302	VE-30018093	FIXED COIL SMD	3.3uH J Q30 185mA
L302	VE-30018093	FIXED COIL SMD	3.3uH J Q30 185mA
L303	VE-30018093	FIXED COIL SMD	3.3uH J Q30 185mA
L303	VE-30018093	FIXED COIL SMD	3.3uH J Q30 185mA
L305	VE-30001990	FIXED COIL	6.8uH Q75 K
L305	VE-30001990	FIXED COIL	6.8uH Q75 K
L306	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L306	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L307	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L307	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L308	VE-30002170	FERRITE CORE	1A RAD (FTZ)
L401	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L401	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L402	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L402	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L408	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L408	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L409	VE-30001996	FIXED COIL	22uH Q40 K
L409	VE-30001996	FIXED COIL	22uH Q40 K
L501	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L501	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L502	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L502	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L503	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L503	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L504	VE-30001996	FIXED COIL	22uH Q40 K
L504	VE-30001996	FIXED COIL	22uH Q40 K
L600	VE-30017143	FIXED COIL SMD	22uH J Q25 125mA
L600	VE-30017143	FIXED COIL SMD	22uH J Q25 125mA
L700	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L700	VE-30001971	FERRITE SMD	600R/100MHz 200mA

⚠Ref No.	Part No.	Part Name	Description Local
L701	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L701	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L702	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L702	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L703	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L703	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L704	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L704	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L705	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L705	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L707	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L707	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L708	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L708	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L709	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L709	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L710	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L710	VE-30006712	FERRITE BEAD	3.5X4.7X0.8
L711	VE-30013412	FERRITE SMD	1.5K/100MHz
L711	VE-30013412	FERRITE SMD	1.5K/100MHz
L712	VE-30013412	FERRITE SMD	1.5K/100MHz
L712	VE-30013412	FERRITE SMD	1.5K/100MHz
L713	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L713	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L714	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L714	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L715	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L715	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L716	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L716	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L717	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L717	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L718	VE-30024779	FERRITE SMD	50R/100MHz 3A
L718	VE-30024779	FERRITE SMD	50R/100MHz 3A
L719	VE-30024779	FERRITE SMD	50R/100MHz 3A
L719	VE-30024779	FERRITE SMD	50R/100MHz 3A
L721	VE-30024779	FERRITE SMD	50R/100MHz 3A
L721	VE-30024779	FERRITE SMD	50R/100MHz 3A
L722	VE-30024779	FERRITE SMD	50R/100MHz 3A
L722	VE-30024779	FERRITE SMD	50R/100MHz 3A
L723	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L723	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L724	VE-30013412	FERRITE SMD	1.5K/100MHz
L724	VE-30013412	FERRITE SMD	1.5K/100MHz
L725	VE-30013412	FERRITE SMD	1.5K/100MHz
L725	VE-30013412	FERRITE SMD	1.5K/100MHz
L726	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L726	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L727	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L727	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L728	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L728	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L729	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L729	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L734	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L734	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L800	VE-30018093	FIXED COIL SMD	3.3uH J Q30 185mA
L800	VE-30018093	FIXED COIL SMD	3.3uH J Q30 185mA
L801	VE-30002170	FERRITE CORE	1A RAD (FTZ)
L802	VE-30020394	FERRITE SMD	330R/100MHz 3A
L802	VE-30020394	FERRITE SMD	330R/100MHz 3A
L803	VE-30020394	FERRITE SMD	330R/100MHz 3A
L803	VE-30020394	FERRITE SMD	330R/100MHz 3A
L805	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L805	VE-30001971	FERRITE SMD	600R/100MHz 200mA
L900	VE-30002170	FERRITE CORE	1A RAD (FTZ)
L901	VE-30019475	FIXED COIL	47uH 2A RAD SH 14X16
L903	VE-30002170	FERRITE CORE	1A RAD (FTZ)
L904	VE-30019475	FIXED COIL	47uH 2A RAD SH 14X16
L906	VE-30001996	FIXED COIL	22uH Q40 K
L906	VE-30001996	FIXED COIL	22uH Q40 K
L907	VE-30002170	FERRITE CORE	1A RAD (FTZ)
L908	VE-30019475	FIXED COIL	47uH 2A RAD SH 14X16
L910	VE-30002002	FIXED COIL	47uH Q60 K
L910	VE-30002002	FIXED COIL	47uH Q60 K
L911	VE-30011450	FIXED COIL	22uH 5.4A RAD 11.5*15.5
⚠F900	VE-30028331	FUSE	7A/32VDC 1206
⚠F900	VE-30028331	FUSE	7A/32VDC 1206
⚠F901	VE-30028331	FUSE	7A/32VDC 1206
⚠F901	VE-30028331	FUSE	7A/32VDC 1206
JK100	VE-30001900	HEADPHONE JACK	HP01/2/3/4/5/6
JK101	VE-30001893	RCA JACK	1P YELLOW 28 FAV
JK102	VE-30001891	RCA JACK	1P WHITE 28 FAV
JK103	VE-30001892	RCA JACK	1P RED 28 FAV
JK104	VE-30001895	JACK	4P DIN TYPE FOR SVHS
JK105	VE-30001891	RCA JACK	1P WHITE 28 FAV
JK106	VE-30001892	RCA JACK	1P RED 28 FAV
JK107	VE-30033200	RCA JACK	1P BLACK 28 FAV
JK700	VE-30001902	HEADPHONE JACK	STEREO WO/SW
JK702	VE-30001891	RCA JACK	1P WHITE 28 FAV
JK703	VE-30001892	RCA JACK	1P RED 28 FAV
JK704	VE-30001892	RCA JACK	1P RED 28 FAV
JK705	VE-30032233	RCA JACK	1P GREEN 28 FAV
JK706	VE-30032234	RCA JACK	1P BLUE 28 FAV
⚠JK901	VE-30027932	DC POWER SOCKET 7.5A	
S730	VE-30012695	RESISTOR SMD	1/16W 470R J
S730	VE-30012695	RESISTOR SMD	1/16W 470R J
SW1	VE-30002181	TACT SWITCH	
SW2	VE-30002181	TACT SWITCH	
SW3	VE-30002181	TACT SWITCH	
SW4	VE-30002181	TACT SWITCH	
SW5	VE-30002181	TACT SWITCH	
SW7	VE-30002181	TACT SWITCH	
SW17	VE-30002181	TACT SWITCH	
⚠TU500	VE-30020654	TUNER WSP (PLL)	38.9 MK3 - HORIZONTAL
X100	VE-30017946	CLYSTAL	14.318 MHZ
X300	VE-30006662	CLYSTAL	6.000 20p HC49U
X400	VE-30008778	CLYSTAL	20.250 13p HC49U
X500	VE-30021113	CLYSTAL	4MHZ LOW PROFILE
X700	VE-30001756	CLYSTAL	18.432 12p HC49U
Z500	VE-30014261	SAW FILTER	K3958M
Z501	VE-30013163	SAW FILTER	K9356

PRINTED WIRING BOARD PARTS LIST
[LT-23C50BU, LT-23C50BU/Z, LT-23C50SU, LT-23C50SU/Z, LT-23C88SJ]

⚠Ref No.	Part No.	Part Name	Description Local
IC1	VE-30001670	PREAMPLIFIER TFMS5360	
IC100	VE-30020865	IC	
IC101	VE-30032066	IC	
IC102	VE-30018006	IC	
IC104	VE-30019132	IC	
IC105	VE-30034805	IC	
IC106	VE-30017956	IC	
IC107	VE-30019372	IC	
IC109	VE-30010822	IC	
IC300	VE-30001853	IC	
IC300	VE-30018652	IC	
IC301	VE-20182313	IC(MICOM)	(SERVICE)
IC302	VE-20180593	IC(MEMORY)	(SERVICE)
IC400	VE-30015059	IC	
IC402	VE-30004999	IC	
IC403	VE-30019372	IC	
IC500	VE-30021083	IC	
IC600	VE-30013686	IC	
IC700	VE-30018263	IC	
IC701	VE-30010024	IC	
IC702	VE-30027663	IC	
IC705	VE-30010822	IC	
IC800	VE-30017847	IC	
IC901	VE-30027613	IC	
IC902	VE-30014344	TRANSISTOR	
IC904	VE-30027612	IC	
IC906	VE-30018326	IC	
IC907	VE-30027635	IC	
IC909	VE-30007739	IC	
IC910	VE-30007739	IC	
Q100	VE-30001457	TRANSISTOR SMD	
Q101	VE-30018060	TRANSISTOR	
Q103	VE-30001457	TRANSISTOR SMD	
Q104	VE-30001457	TRANSISTOR SMD	
Q105	VE-30001457	TRANSISTOR SMD	
Q300	VE-30001458	TRANSISTOR SMD	
Q301	VE-30001457	TRANSISTOR SMD	
Q302	VE-30001457	TRANSISTOR SMD	
Q303	VE-30001457	TRANSISTOR SMD	
Q304	VE-30001457	TRANSISTOR SMD	
Q305	VE-30001457	TRANSISTOR SMD	
Q306	VE-30001457	TRANSISTOR SMD	
Q307	VE-30001457	TRANSISTOR SMD	
Q308	VE-30001458	TRANSISTOR SMD	
Q309	VE-30001457	TRANSISTOR SMD	
Q310	VE-30001458	TRANSISTOR SMD	
Q311	VE-30001423	TRANSISTOR	
Q312	VE-30001458	TRANSISTOR SMD	
Q313	VE-30001457	TRANSISTOR SMD	
Q314	VE-30001457	TRANSISTOR SMD	
Q315	VE-30001457	TRANSISTOR SMD	
Q316	VE-30001457	TRANSISTOR SMD	
Q317	VE-30001457	TRANSISTOR SMD	
Q318	VE-30001458	TRANSISTOR SMD	
Q319	VE-30001458	TRANSISTOR SMD	
Q400	VE-30001457	TRANSISTOR SMD	
Q501	VE-30001457	TRANSISTOR SMD	
Q502	VE-30001457	TRANSISTOR SMD	
Q600	VE-30001457	TRANSISTOR SMD	
Q601	VE-30001457	TRANSISTOR SMD	
Q602	VE-30001457	TRANSISTOR SMD	
Q603	VE-30001457	TRANSISTOR SMD	
Q700	VE-30001458	TRANSISTOR SMD	
Q701	VE-30001457	TRANSISTOR SMD	
Q702	VE-30001457	TRANSISTOR SMD	
Q703	VE-30001457	TRANSISTOR SMD	
Q704	VE-30001457	TRANSISTOR SMD	
Q705	VE-30001457	TRANSISTOR SMD	
Q706	VE-30001457	TRANSISTOR SMD	
Q708	VE-30001458	TRANSISTOR SMD	
Q709	VE-30001457	TRANSISTOR SMD	
Q900	VE-30001457	TRANSISTOR SMD	
Q901	VE-30001457	TRANSISTOR SMD	
Q902	VE-30001454	TRANSISTOR	
Q904	VE-30001457	TRANSISTOR SMD	
Q905	VE-30001457	TRANSISTOR SMD	
D1	VE-30016020	DIODE	
D2	VE-30019678	LED	RED/GREEN
D100	VE-30001285	DIODE SMD	
D101	VE-30001285	DIODE SMD	
D103	VE-30007169	DIODE	
D105	VE-30007169	DIODE	
D107	VE-30007169	DIODE	
D108	VE-30025773	DIODE SMD	
D109	VE-30025773	DIODE SMD	
D111	VE-30007169	DIODE	
D112	VE-30007169	DIODE	
D114	VE-30007763	DIODE SMD	
D300	VE-30012412	DIODE SMD	
D301	VE-30001285	DIODE SMD	
D302	VE-30001285	DIODE SMD	
D305	VE-30001285	DIODE SMD	
D306	VE-30001285	DIODE SMD	
D307	VE-30001285	DIODE SMD	
D500	VE-30001285	DIODE SMD	
D501	VE-30012411	DIODE SMD	
D600	VE-30007760	DIODE SMD	
D700	VE-30007761	DIODE SMD	
D701	VE-30001285	DIODE SMD	
D702	VE-30001285	DIODE SMD	
D703	VE-30001285	DIODE SMD	
D704	VE-30007760	DIODE SMD	
D706	VE-30007760	DIODE SMD	
D707	VE-30007760	DIODE SMD	
D708	VE-30007760	DIODE SMD	
D709	VE-30007760	DIODE SMD	
D710	VE-30007760	DIODE SMD	
D711	VE-30007760	DIODE SMD	
D712	VE-30007760	DIODE SMD	
D713	VE-30007760	DIODE SMD	
D714	VE-30007760	DIODE SMD	
D715	VE-30007760	DIODE SMD	
D716	VE-30007760	DIODE SMD	
D717	VE-30007760	DIODE SMD	
D719	VE-30001285	DIODE SMD	
D720	VE-30007760	DIODE SMD	
D721	VE-30007760	DIODE SMD	
D722	VE-30007760	DIODE SMD	
D723	VE-30018574	DIODE	
D725	VE-30009699	DIODE SMD	
D726	VE-30009699	DIODE SMD	
D900	VE-30001313	DIODE	
D901	VE-30001313	DIODE	
D902	VE-30001285	DIODE SMD	
D903	VE-30001343	DIODE	
D904	VE-30001313	DIODE	
D905	VE-30001285	DIODE SMD	
D906	VE-30001285	DIODE SMD	
C1	VE-30000371	E CAPACITOR	22uF 50V M
C100	VE-30012566	CAPACITOR SMD	22pF 50V J
C100	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C101	VE-30012566	CAPACITOR SMD	22pF 50V J
C101	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C102	VE-30000190	C CAPACITOR	100pF 50V J CH
C102	VE-30016654	CAPACITOR SMD	100nF 16V K R
C103	VE-30000190	C CAPACITOR	100pF 50V J CH
C104	VE-30000190	C CAPACITOR	100pF 50V J CH
C104	VE-30016654	CAPACITOR SMD	100nF 16V K R
C105	VE-30000190	C CAPACITOR	100pF 50V J CH
C105	VE-30016654	CAPACITOR SMD	100nF 16V K R
C106	VE-30000190	C CAPACITOR	100pF 50V J CH
C106	VE-30016654	CAPACITOR SMD	100nF 16V K R
C107	VE-30000190	C CAPACITOR	100pF 50V J CH
C107	VE-30016654	CAPACITOR SMD	100nF 16V K R
C108	VE-30000190	C CAPACITOR	100pF 50V J CH
C108	VE-30012582	CAPACITOR SMD	10nF 50V K R
C109	VE-30012582	CAPACITOR SMD	10nF 50V K R
C110	VE-30012582	CAPACITOR SMD	10nF 50V K R
C111	VE-30012582	CAPACITOR SMD	10nF 50V K R
C112	VE-30016654	CAPACITOR SMD	100nF 16V K R
C113	VE-30012582	CAPACITOR SMD	10nF 50V K R
C114	VE-30016654	CAPACITOR SMD	100nF 16V K R
C115	VE-30000371	E CAPACITOR	22uF 50V M
C116	VE-30012590	CAPACITOR SMD	47nF 50V K
C117	VE-30012590	CAPACITOR SMD	47nF 50V K
C118	VE-30012590	CAPACITOR SMD	47nF 50V K
C120	VE-30016654	CAPACITOR SMD	100nF 16V K R

⚠Ref No.	Part No.	Part Name	Description	Local
C121	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C122	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C123	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C124	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C125	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C126	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C127	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C128	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C129	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C130	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C131	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C132	VE-30012581	CAPACITOR SMD	1nF 50V K R	
C133	VE-30012587	CAPACITOR SMD	3.3nF 50V K	
C134	VE-30012605	CAPACITOR SMD	39nF 50V M	
C136	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C137	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C138	VE-30000371	E CAPACITOR	22uF 50V M	
C139	VE-30000371	E CAPACITOR	22uF 50V M	
C146	VE-30000109	CAPACITOR MKT	470nF 63V J	
C147	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C148	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH	
C149	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH	
C150	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C151	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C152	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C153	VE-30012567	CAPACITOR SMD	220pF 50V J	
C154	VE-30012567	CAPACITOR SMD	220pF 50V J	
C155	VE-30012567	CAPACITOR SMD	220pF 50V J	
C156	VE-30000371	E CAPACITOR	22uF 50V M	
C157	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C158	VE-30012567	CAPACITOR SMD	220pF 50V J	
C159	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C160	VE-30012567	CAPACITOR SMD	220pF 50V J	
C161	VE-30012567	CAPACITOR SMD	220pF 50V J	
C162	VE-30000371	E CAPACITOR	22uF 50V M	
C163	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C164	VE-30012567	CAPACITOR SMD	220pF 50V J	
C165	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C166	VE-30012567	CAPACITOR SMD	220pF 50V J	
C167	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C168	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C169	VE-30012567	CAPACITOR SMD	220pF 50V J	
C170	VE-30012567	CAPACITOR SMD	220pF 50V J	
C171	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C172	VE-30012567	CAPACITOR SMD	220pF 50V J	
C174	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C175	VE-30012567	CAPACITOR SMD	220pF 50V J	
C176	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C177	VE-30000371	E CAPACITOR	22uF 50V M	
C178	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C183	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C185	VE-30000352	E CAPACITOR	100uF 16V M	
C187	VE-30012573	CAPACITOR SMD	47pF 50V J	
C189	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C190	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C217	VE-30012581	CAPACITOR SMD	1nF 50V K R	
C218	VE-30012575	CAPACITOR SMD	4.7pF 50V C CH	
C219	VE-30024742	E CAPACITOR	10uF 16V N	
C300	VE-30000352	E CAPACITOR	100uF 16V M	
C301	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C302	VE-30000371	E CAPACITOR	22uF 50V M	
C303	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C304	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C305	VE-30000371	E CAPACITOR	22uF 50V M	
C306	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C307	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C308	VE-30000371	E CAPACITOR	22uF 50V M	
C309	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C310	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C311	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C312	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C313	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C314	VE-30000109	CAPACITOR MKT	470nF 63V J	
C315	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C316	VE-30000352	E CAPACITOR	100uF 16V M	
C317	VE-30012569	CAPACITOR SMD	33pF 50V J	
C318	VE-30012569	CAPACITOR SMD	33pF 50V J	
C319	VE-30000371	E CAPACITOR	22uF 50V M	
C320	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C321	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C324	VE-30000371	E CAPACITOR	22uF 50V M	
C325	VE-30012611	CAPACITOR SMD	120pF 50V J	
C326	VE-30012576	CAPACITOR SMD	56pF 50V J CH	
C327	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C328	VE-30000393	E CAPACITOR	3.3uF 50V M	
C331	VE-30012607	CAPACITOR SMD	150pF 50V J	
C332	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C333	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C334	VE-30000354	E CAPACITOR	100uF 35V M	
C335	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C336	VE-30012611	CAPACITOR SMD	120pF 50V J	
C337	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C338	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C339	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C340	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V	
C400	VE-30012609	CAPACITOR SMD	68nF 50V K	
C401	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C402	VE-30012590	CAPACITOR SMD	47nF 50V K	
C403	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C404	VE-30012613	CAPACITOR SMD	3.3pF 50V C CH	
C405	VE-30012613	CAPACITOR SMD	3.3pF 50V C CH	
C406	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C407	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C408	VE-30012572	CAPACITOR SMD	390pF 50V J	
C409	VE-30000345	E CAPACITOR	10uF 50V M	
C410	VE-30012590	CAPACITOR SMD	47nF 50V K	
C411	VE-30000068	CAPACITOR MKT	1nF 63V K	
C412	VE-30007082	CAPACITOR MKT	680nF 63V J	
C413	VE-30007082	CAPACITOR MKT	680nF 63V J	
C414	VE-30012582	CAPACITOR SMD	10nF 50V K R	
C415	VE-30000345	E CAPACITOR	10uF 50V M	
C416	VE-30012590	CAPACITOR SMD	47nF 50V K	
C420	VE-30000294	CAPACITOR SMD	100nF 50V K	
C421	VE-30000294	CAPACITOR SMD	100nF 50V K	
C422	VE-30000294	CAPACITOR SMD	100nF 50V K	
C424	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C425	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C426	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C427	VE-30012572	CAPACITOR SMD	390pF 50V J	
C428	VE-30012590	CAPACITOR SMD	47nF 50V K	
C429	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C430	VE-30012609	CAPACITOR SMD	68nF 50V K	
C431	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C432	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C433	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C434	VE-30012570	CAPACITOR SMD	330pF 50V J	
C435	VE-30012570	CAPACITOR SMD	330pF 50V J	
C436	VE-30012570	CAPACITOR SMD	330pF 50V J	
C437	VE-30007082	CAPACITOR MKT	680nF 63V J	
C438	VE-30000371	E CAPACITOR	22uF 50V M	
C439	VE-30012609	CAPACITOR SMD	68nF 50V K	
C440	VE-30000352	E CAPACITOR	100uF 16V M	
C441	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C442	VE-30012569	CAPACITOR SMD	33pF 50V J	
C443	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C485	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C486	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C487	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C488	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C489	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C490	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C491	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C492	VE-30000345	E CAPACITOR	10uF 50V M	
C493	VE-30000294	CAPACITOR SMD	100nF 50V K	
C494	VE-30012569	CAPACITOR SMD	33pF 50V J	
C495	VE-30012569	CAPACITOR SMD	33pF 50V J	
C496	VE-30012569	CAPACITOR SMD	33pF 50V J	
C502	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C503	VE-30000345	E CAPACITOR	10uF 50V M	
C505	VE-30000400	E CAPACITOR	47uF 50V M	
C506	VE-30012582	CAPACITOR SMD	10nF 50V K R	
C507	VE-30012572	CAPACITOR SMD	390pF 50V J	
C508	VE-30000109	CAPACITOR MKT	470nF 63V J	
C509	VE-30012582	CAPACITOR SMD	10nF 50V K R	
C510	VE-30012566	CAPACITOR SMD	22pF 50V J	
C511	VE-30000109	CAPACITOR MKT	470nF 63V J	
C512	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C513	VE-30012583	CAPACITOR SMD	1.5nF 50V K	
C514	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C515	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C517	VE-30012569	CAPACITOR SMD	33pF 50V J	
C519	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C520	VE-30012582	CAPACITOR SMD	10nF 50V K R	
C522	VE-30000315	CAPACITOR SMD	220nF 25V Z	
C523	VE-30000371	E CAPACITOR	22uF 50V M	
C524	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C525	VE-30000407	E CAPACITOR	470uF 16V M	
C526	VE-30016654	CAPACITOR SMD	100nF 16V K R	
C527	VE-30000345	E CAPACITOR	10uF 50V M	
C600	VE-30000352	E CAPACITOR	100uF 16V M	
C601	VE-30000074	CAPACITOR MKT	100nF 63V J	
C602	VE-30000074	CAPACITOR MKT	100nF 63V J	
C603	VE-30000074	CAPACITOR MKT	100nF 63V J	
C604	VE-30016654	CAPACITOR SMD	100nF 16V K R	

⚠Ref No.	Part No.	Part Name	Description Local
C605	VE-30016654	CAPACITOR SMD	100nF 16V K R
C606	VE-30000074	CAPACITOR MKT	100nF 63V J
C607	VE-30012569	CAPACITOR SMD	33pF 50V J
C608	VE-30016654	CAPACITOR SMD	100nF 16V K R
C609	VE-30016654	CAPACITOR SMD	100nF 16V K R
C610	VE-30016654	CAPACITOR SMD	100nF 16V K R
C611	VE-30016654	CAPACITOR SMD	100nF 16V K R
C612	VE-30016654	CAPACITOR SMD	100nF 16V K R
C613	VE-30016654	CAPACITOR SMD	100nF 16V K R
C614	VE-30016654	CAPACITOR SMD	100nF 16V K R
C700	VE-30016654	CAPACITOR SMD	100nF 16V K R
C701	VE-30012587	CAPACITOR SMD	3.3nF 50V K
C702	VE-30000352	E CAPACITOR	100uF 16V M
C703	VE-30012587	CAPACITOR SMD	3.3nF 50V K
C704	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C705	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C706	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C707	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C708	VE-30016654	CAPACITOR SMD	100nF 16V K R
C709	VE-30000315	CAPACITOR SMD	220nF 25V Z
C710	VE-30000315	CAPACITOR SMD	220nF 25V Z
C711	VE-30000315	CAPACITOR SMD	220nF 25V Z
C712	VE-30000315	CAPACITOR SMD	220nF 25V Z
C713	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C714	VE-30016654	CAPACITOR SMD	100nF 16V K R
C715	VE-30000393	E CAPACITOR	3.3uF 50V M
C716	VE-30000345	E CAPACITOR	10uF 50V M
C717	VE-30000345	E CAPACITOR	10uF 50V M
C718	VE-30000345	E CAPACITOR	10uF 50V M
C719	VE-30012581	CAPACITOR SMD	1nF 50V K R
C720	VE-30012581	CAPACITOR SMD	1nF 50V K R
C721	VE-30012565	CAPACITOR SMD	1.8pF 50V J CH
C722	VE-30012565	CAPACITOR SMD	1.8pF 50V J CH
C723	VE-30012581	CAPACITOR SMD	1nF 50V K R
C724	VE-30012581	CAPACITOR SMD	1nF 50V K R
C725	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C726	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C727	VE-30016654	CAPACITOR SMD	100nF 16V K R
C728	VE-30016654	CAPACITOR SMD	100nF 16V K R
C729	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C730	VE-30012607	CAPACITOR SMD	150pF 50V J
C731	VE-30012607	CAPACITOR SMD	150pF 50V J
C732	VE-30000315	CAPACITOR SMD	220nF 25V Z
C733	VE-30000315	CAPACITOR SMD	220nF 25V Z
C734	VE-30016654	CAPACITOR SMD	100nF 16V K R
C735	VE-30012583	CAPACITOR SMD	1.5nF 50V K
C736	VE-30000352	E CAPACITOR	100uF 16V M
C737	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C738	VE-30000352	E CAPACITOR	100uF 16V M
C739	VE-30000362	E CAPACITOR	1uF 50V M
C740	VE-30012583	CAPACITOR SMD	1.5nF 50V K
C741	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C742	VE-30000371	E CAPACITOR	22uF 50V M
C743	VE-30000371	E CAPACITOR	22uF 50V M
C744	VE-30000371	E CAPACITOR	22uF 50V M
C745	VE-30000371	E CAPACITOR	22uF 50V M
C746	VE-30012567	CAPACITOR SMD	220pF 50V J
C747	VE-30012574	CAPACITOR SMD	470pF 50V J
C748	VE-30012582	CAPACITOR SMD	10nF 50V K R
C749	VE-30016654	CAPACITOR SMD	100nF 16V K R
C750	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C751	VE-30000407	E CAPACITOR	470uF 16V M
C752	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C753	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C754	VE-30012574	CAPACITOR SMD	470pF 50V J
C755	VE-30012574	CAPACITOR SMD	470pF 50V J
C756	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C757	VE-30012585	CAPACITOR SMD	2.2nF 50V K R
C758	VE-30000315	CAPACITOR SMD	220nF 25V Z
C759	VE-30000315	CAPACITOR SMD	220nF 25V Z
C760	VE-30012581	CAPACITOR SMD	1nF 50V K R
C761	VE-30012581	CAPACITOR SMD	1nF 50V K R
C762	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C763	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C764	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C765	VE-30012589	CAPACITOR SMD	4.7nF 50V K
C766	VE-30016654	CAPACITOR SMD	100nF 16V K R
C767	VE-30012607	CAPACITOR SMD	150pF 50V J
C768	VE-30012607	CAPACITOR SMD	150pF 50V J
C769	VE-30000371	E CAPACITOR	22uF 50V M
C770	VE-30000371	E CAPACITOR	22uF 50V M
C771	VE-30000315	CAPACITOR SMD	220nF 25V Z
C772	VE-30012581	CAPACITOR SMD	1nF 50V K R
C773	VE-30000315	CAPACITOR SMD	220nF 25V Z
C774	VE-30012581	CAPACITOR SMD	1nF 50V K R
C775	VE-30000345	E CAPACITOR	10uF 50V M
C776	VE-30000294	CAPACITOR SMD	100nF 50V K
C777	VE-30000294	CAPACITOR SMD	100nF 50V K
C778	VE-30000294	CAPACITOR SMD	100nF 50V K
C779	VE-30012567	CAPACITOR SMD	220pF 50V J
C780	VE-30012582	CAPACITOR SMD	10nF 50V K R
C781	VE-30012582	CAPACITOR SMD	10nF 50V K R
C782	VE-30000294	CAPACITOR SMD	100nF 50V K
C783	VE-30000294	CAPACITOR SMD	100nF 50V K
C784	VE-30000345	E CAPACITOR	10uF 50V M
C785	VE-30012581	CAPACITOR SMD	1nF 50V K R
C786	VE-30012581	CAPACITOR SMD	1nF 50V K R
C787	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C788	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C789	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C790	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C791	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C792	VE-30000294	CAPACITOR SMD	100nF 50V K
C793	VE-30012582	CAPACITOR SMD	10nF 50V K R
C794	VE-30012582	CAPACITOR SMD	10nF 50V K R
C795	VE-30012581	CAPACITOR SMD	1nF 50V K R
C796	VE-30012581	CAPACITOR SMD	1nF 50V K R
C797	VE-30000294	CAPACITOR SMD	100nF 50V K
C798	VE-30012574	CAPACITOR SMD	470pF 50V J
C799	VE-30012567	CAPACITOR SMD	220pF 50V J
C801	VE-30000294	CAPACITOR SMD	100nF 50V K
C802	VE-30000294	CAPACITOR SMD	100nF 50V K
C803	VE-30000345	E CAPACITOR	10uF 50V M
C804	VE-30016654	CAPACITOR SMD	100nF 16V K R
C805	VE-30012581	CAPACITOR SMD	1nF 50V K R
C806	VE-30000354	E CAPACITOR	100uF 35V M
C807	VE-30012574	CAPACITOR SMD	470pF 50V J
C808	VE-30000315	CAPACITOR SMD	220nF 25V Z
C808	VE-30016654	CAPACITOR SMD	100nF 16V K R
C809	VE-30000315	CAPACITOR SMD	220nF 25V Z
C810	VE-30012582	CAPACITOR SMD	10nF 50V K R
C811	VE-30016654	CAPACITOR SMD	100nF 16V K R
C812	VE-30000315	CAPACITOR SMD	220nF 25V Z
C814	VE-30016654	CAPACITOR SMD	100nF 16V K R
C815	VE-30012582	CAPACITOR SMD	10nF 50V K R
C816	VE-30012582	CAPACITOR SMD	10nF 50V K R
C817	VE-30016654	CAPACITOR SMD	100nF 16V K R
C818	VE-30016654	CAPACITOR SMD	100nF 16V K R
C820	VE-30000315	CAPACITOR SMD	220nF 25V Z
C823	VE-30012560	CAPACITOR SMD	100pF 50V J
C824	VE-30012560	CAPACITOR SMD	100pF 50V J
C825	VE-30012581	CAPACITOR SMD	1nF 50V K R
C827	VE-30000352	E CAPACITOR	100uF 16V M
C828	VE-30016654	CAPACITOR SMD	100nF 16V K R
C829	VE-30012582	CAPACITOR SMD	10nF 50V K R
C830	VE-30016654	CAPACITOR SMD	100nF 16V K R
C831	VE-30000371	E CAPACITOR	22uF 50V M
C832	VE-30012562	CAPACITOR SMD	15pF 50V J
C833	VE-30016654	CAPACITOR SMD	100nF 16V K R
C834	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C835	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C837	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C839	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C840	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C846	VE-30000407	E CAPACITOR	470uF 16V M
C847	VE-30012569	CAPACITOR SMD	33pF 50V J
C848	VE-30012569	CAPACITOR SMD	33pF 50V J
C849	VE-30012574	CAPACITOR SMD	470pF 50V J
C850	VE-30012569	CAPACITOR SMD	33pF 50V J
C851	VE-30012574	CAPACITOR SMD	470pF 50V J
C852	VE-30012574	CAPACITOR SMD	470pF 50V J
C853	VE-30012574	CAPACITOR SMD	470pF 50V J
C858	VE-30012569	CAPACITOR SMD	33pF 50V J
C859	VE-30012569	CAPACITOR SMD	33pF 50V J
C860	VE-30012569	CAPACITOR SMD	33pF 50V J
C861	VE-30020694	CAPACITOR SMD	1uF 16V Z Y5V
C862	VE-30016654	CAPACITOR SMD	100nF 16V K R
C863	VE-30012581	CAPACITOR SMD	1nF 50V K R
C900	VE-30000354	E CAPACITOR	100uF 35V M
C903	VE-30000354	E CAPACITOR	100uF 35V M
C904	VE-30012582	CAPACITOR SMD	10nF 50V K R
C908	VE-30000359	E CAPACITOR	1000uF 16V M
C909	VE-30016654	CAPACITOR SMD	100nF 16V K R
C910	VE-30000354	E CAPACITOR	100uF 35V M
C911	VE-30012582	CAPACITOR SMD	10nF 50V K R
C912	VE-30000359	E CAPACITOR	1000uF 16V M
C913	VE-30016654	CAPACITOR SMD	100nF 16V K R
C915	VE-30016654	CAPACITOR SMD	100nF 16V K R
C916	VE-30016654	CAPACITOR SMD	100nF 16V K R
C917	VE-30000371	E CAPACITOR	22uF 50V M
C918	VE-30000371	E CAPACITOR	22uF 50V M
C919	VE-30016654	CAPACITOR SMD	100nF 16V K R
C920	VE-30000354	E CAPACITOR	100uF 35V M
C921	VE-30012582	CAPACITOR SMD	10nF 50V K R

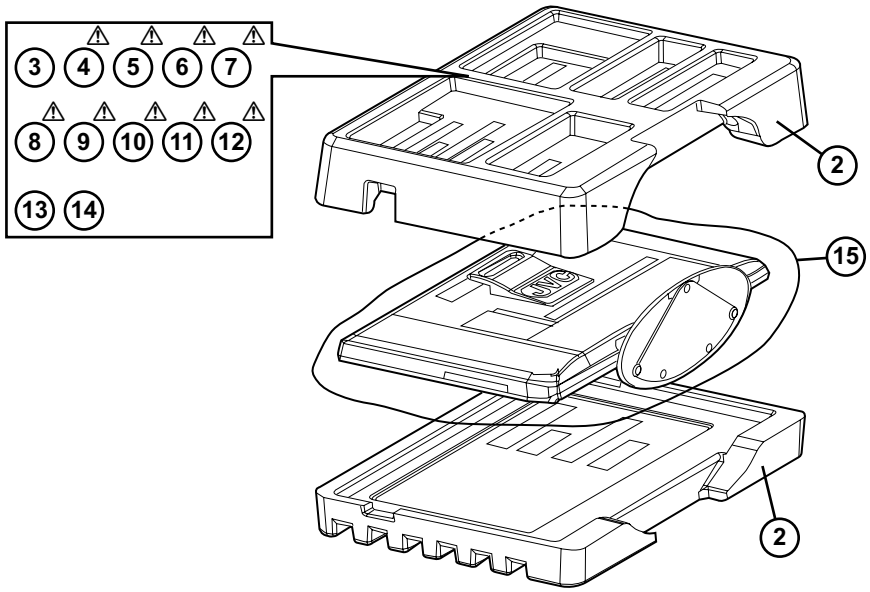
⚠Ref No.	Part No.	Part Name	Description Local
C922	VE-30000359	E CAPACITOR	1000uF 16V M
C923	VE-30016654	CAPACITOR SMD	100nF 16V K R
C924	VE-30012576	CAPACITOR SMD	56pF 50V J CH
C925	VE-30012560	CAPACITOR SMD	100pF 50V J
C926	VE-30000371	E CAPACITOR	22uF 50V M
C927	VE-30000294	CAPACITOR SMD	100nF 50V K
C928	VE-30000345	E CAPACITOR	10uF 50V M
C929	VE-30000294	CAPACITOR SMD	100nF 50V K
C930	VE-30000371	E CAPACITOR	22uF 50V M
C932	VE-30000294	CAPACITOR SMD	100nF 50V K
C933	VE-30000294	CAPACITOR SMD	100nF 50V K
C934	VE-30031594	E CAPACITOR	2200uF 10V M
C935	VE-30016654	CAPACITOR SMD	100nF 16V K R
C936	VE-30016654	CAPACITOR SMD	100nF 16V K R
C937	VE-30000371	E CAPACITOR	22uF 50V M
C938	VE-30000352	E CAPACITOR	100uF 16V M
C941	VE-30000294	CAPACITOR SMD	100nF 50V K
R1	VE-30000689	RESISTOR CF	1/4W 3.9K J
R1	VE-30012510	RESISTOR SMD	1/16W 100R J
R2	VE-30000526	RESISTOR CF	1/4W 1.5K J
R3	VE-30000770	RESISTOR CF	1/4W 680R J
R4	VE-30000712	RESISTOR CF	1/4W 470R J
R5	VE-30000622	RESISTOR CF	1/4W 270R J
R100	VE-30012713	RESISTOR SMD	1/16W 75R J
R100	VE-30014128	RESISTOR SMD	1/16W 33R J
R101	VE-30012713	RESISTOR SMD	1/16W 75R J
R101	VE-30014128	RESISTOR SMD	1/16W 33R J
R102	VE-30012641	RESISTOR SMD	1/16W 10K J
R102	VE-30012713	RESISTOR SMD	1/16W 75R J
R103	VE-30012641	RESISTOR SMD	1/16W 10K J
R103	VE-30012713	RESISTOR SMD	1/16W 75R J
R104	VE-30000594	RESISTOR CF	1/4W 22K J
R104	VE-30012713	RESISTOR SMD	1/16W 75R J
R105	VE-30000466	RESISTOR CF	1/4W 1K J
R105	VE-30012641	RESISTOR SMD	1/16W 10K J
R106	VE-30000594	RESISTOR CF	1/4W 22K J
R106	VE-30012641	RESISTOR SMD	1/16W 10K J
R107	VE-30000466	RESISTOR CF	1/4W 1K J
R107	VE-30012510	RESISTOR SMD	1/16W 100R J
R108	VE-30000650	RESISTOR CF	1/4W 33R J
R108	VE-30012510	RESISTOR SMD	1/16W 100R J
R109	VE-30000650	RESISTOR CF	1/4W 33R J
R109	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R110	VE-30000594	RESISTOR CF	1/4W 22K J
R110	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R111	VE-30000712	RESISTOR CF	1/4W 470R J
R111	VE-30012510	RESISTOR SMD	1/16W 100R J
R112	VE-30000594	RESISTOR CF	1/4W 22K J
R113	VE-30000712	RESISTOR CF	1/4W 470R J
R114	VE-30000594	RESISTOR CF	1/4W 22K J
R115	VE-30000712	RESISTOR CF	1/4W 470R J
R121	VE-30012677	RESISTOR SMD	1/16W 3.3K J
R122	VE-30012510	RESISTOR SMD	1/16W 100R J
R123	VE-30012510	RESISTOR SMD	1/16W 100R J
R127	VE-30012641	RESISTOR SMD	1/16W 10K J
R128	VE-30012641	RESISTOR SMD	1/16W 10K J
R130	VE-30030692	FERRITE NET	
R131	VE-30030692	FERRITE NET	
R132	VE-30030692	FERRITE NET	
R133	VE-30030692	FERRITE NET	
R134	VE-30030692	FERRITE NET	
R135	VE-30030692	FERRITE NET	
R136	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R137	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R138	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R139	VE-30012657	RESISTOR SMD	1/16W 1K J
R141	VE-30012641	RESISTOR SMD	1/16W 10K J
R142	VE-30012657	RESISTOR SMD	1/16W 1K J
R143	VE-30012657	RESISTOR SMD	1/16W 1K J
R145	VE-30012510	RESISTOR SMD	1/16W 100R J
R146	VE-30012510	RESISTOR SMD	1/16W 100R J
R147	VE-30012510	RESISTOR SMD	1/16W 100R J
R148	VE-30012510	RESISTOR SMD	1/16W 100R J
R149	VE-30012641	RESISTOR SMD	1/16W 10K J
R150	VE-30012657	RESISTOR SMD	1/16W 1K J
R151	VE-30012657	RESISTOR SMD	1/16W 1K J
R152	VE-30012655	RESISTOR SMD	1/16W 180R J
R156	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R157	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R158	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R159	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R160	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R161	VE-30017653	RESISTOR SARRAY	1/16W 47RX4 J
R162	VE-30012509	RESISTOR SMD	1/16W 100K J
R165	VE-30025836	FERRITE NET	
R166	VE-30025836	FERRITE NET	
R167	VE-30020529	FERRITE SMD	
R168	VE-30012641	RESISTOR SMD	1/16W 10K J
R169	VE-30012641	RESISTOR SMD	1/16W 10K J
R170	VE-30012641	RESISTOR SMD	1/16W 10K J
R172	VE-30012641	RESISTOR SMD	1/16W 10K J
R173	VE-30012641	RESISTOR SMD	1/16W 10K J
R174	VE-30012641	RESISTOR SMD	1/16W 10K J
R175	VE-30012641	RESISTOR SMD	1/16W 10K J
R176	VE-30012641	RESISTOR SMD	1/16W 10K J
R177	VE-30012641	RESISTOR SMD	1/16W 10K J
R178	VE-30012641	RESISTOR SMD	1/16W 10K J
R179	VE-30012641	RESISTOR SMD	1/16W 10K J
R180	VE-30012641	RESISTOR SMD	1/16W 10K J
R181	VE-30012641	RESISTOR SMD	1/16W 10K J
R182	VE-30012641	RESISTOR SMD	1/16W 10K J
R183	VE-30012657	RESISTOR SMD	1/16W 1K J
R184	VE-30012657	RESISTOR SMD	1/16W 1K J
R185	VE-30012641	RESISTOR SMD	1/16W 10K J
R189	VE-30012657	RESISTOR SMD	1/16W 1K J
R197	VE-30022083	RESISTOR SMD	1/16W 330R J
R300	VE-30012657	RESISTOR SMD	1/16W 1K J
R301	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R302	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R303	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R304	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R305	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R306	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R307	VE-30018409	RESISTOR SARRAY	1/16W 330R J
R308	VE-30012657	RESISTOR SMD	1/16W 1K J
R309	VE-30012669	RESISTOR SMD	1/16W 22K J
R310	VE-30012510	RESISTOR SMD	1/16W 100R J
R311	VE-30012510	RESISTOR SMD	1/16W 100R J
R312	VE-30012510	RESISTOR SMD	1/16W 100R J
R313	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R314	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R315	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R316	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R317	VE-30012650	RESISTOR SMD	1/16W 15K J
R318	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R319	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R320	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R321	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R322	VE-30012695	RESISTOR SMD	1/16W 470R J
R323	VE-30012987	RESISTOR SMD	1/16W 56R J
R324	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R325	VE-30012695	RESISTOR SMD	1/16W 470R J
R326	VE-30012695	RESISTOR SMD	1/16W 470R J
R327	VE-30012695	RESISTOR SMD	1/16W 470R J
R328	VE-30012685	RESISTOR SMD	1/16W 33K J
R329	VE-30012685	RESISTOR SMD	1/16W 33K J
R330	VE-30012685	RESISTOR SMD	1/16W 33K J
R331	VE-30012685	RESISTOR SMD	1/16W 33K J
R332	VE-30012510	RESISTOR SMD	1/16W 100R J
R333	VE-30012510	RESISTOR SMD	1/16W 100R J
R334	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R335	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R336	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R337	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R339	VE-30012509	RESISTOR SMD	1/16W 100K J
R340	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R341	VE-30012644	RESISTOR SMD	1/16W 12K J
R342	VE-30012668	RESISTOR SMD	1/16W 220R J
R343	VE-30012668	RESISTOR SMD	1/16W 220R J
R344	VE-30012657	RESISTOR SMD	1/16W 1K J
R345	VE-30012669	RESISTOR SMD	1/16W 22K J
R346	VE-30012657	RESISTOR SMD	1/16W 1K J
R347	VE-30014022	RESISTOR SMD	1/16W 47R J
R348	VE-30012655	RESISTOR SMD	1/16W 180R J
R349	VE-30014022	RESISTOR SMD	1/16W 47R J
R350	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R352	VE-30012669	RESISTOR SMD	1/16W 22K J
R353	VE-30012641	RESISTOR SMD	1/16W 10K J
R354	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R355	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R356	VE-30012669	RESISTOR SMD	1/16W 22K J
R357	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R358	VE-30012695	RESISTOR SMD	1/16W 470R J
R359	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R360	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R361	VE-30012657	RESISTOR SMD	1/16W 1K J
R362	VE-30012982	RESISTOR SMD	1/16W 10R J
R363	VE-30012695	RESISTOR SMD	1/16W 470R J
R364	VE-30012695	RESISTOR SMD	1/16W 470R J
R368	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R369	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R370	VE-30012669	RESISTOR SMD	1/16W 22K J
R371	VE-30012657	RESISTOR SMD	1/16W 1K J

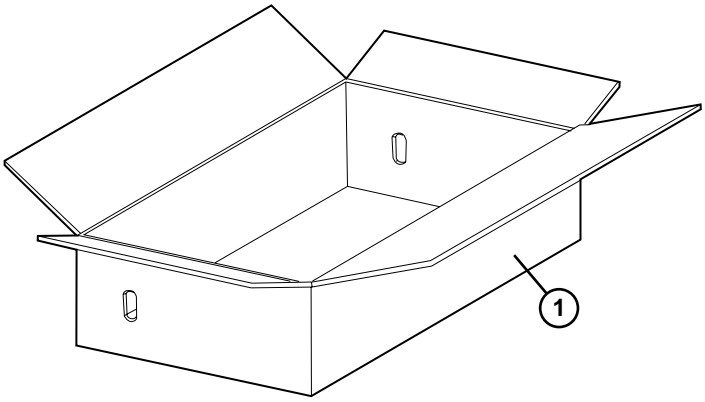
⚠Ref No.	Part No.	Part Name	Description Local
R372	VE-30014022	RESISTOR SMD	1/16W 47R J
R373	VE-30012655	RESISTOR SMD	1/16W 180R J
R374	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R375	VE-30012684	RESISTOR SMD	1/16W 330R J
R376	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R377	VE-30012684	RESISTOR SMD	1/16W 330R J
R378	VE-30012684	RESISTOR SMD	1/16W 330R J
R379	VE-30012510	RESISTOR SMD	1/16W 100R J
R380	VE-30012669	RESISTOR SMD	1/16W 22K J
R381	VE-30012657	RESISTOR SMD	1/16W 1K J
R382	VE-30012982	RESISTOR SMD	1/16W 10R J
R383	VE-30012650	RESISTOR SMD	1/16W 15K J
R384	VE-30012679	RESISTOR SMD	1/16W 3.9K J
R385	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R386	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R387	VE-30012506	RESISTOR SMD	1/16W 1.5K J
R388	VE-30012641	RESISTOR SMD	1/16W 10K J
R389	VE-30012641	RESISTOR SMD	1/16W 10K J
R390	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R391	VE-30012696	RESISTOR SMD	1/16W 47K J
R392	VE-30012696	RESISTOR SMD	1/16W 47K J
R393	VE-30012510	RESISTOR SMD	1/16W 100R J
R394	VE-30012641	RESISTOR SMD	1/16W 10K J
R395	VE-30012684	RESISTOR SMD	1/16W 330R J
R396	VE-30012684	RESISTOR SMD	1/16W 330R J
R397	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R399	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R400	VE-30012713	RESISTOR SMD	1/16W 75R J
R401	VE-30012713	RESISTOR SMD	1/16W 75R J
R402	VE-30012713	RESISTOR SMD	1/16W 75R J
R404	VE-30012713	RESISTOR SMD	1/16W 75R J
R405	VE-30012713	RESISTOR SMD	1/16W 75R J
R406	VE-30012713	RESISTOR SMD	1/16W 75R J
R407	VE-30012510	RESISTOR SMD	1/16W 100R J
R408	VE-30012510	RESISTOR SMD	1/16W 100R J
R409	VE-30012713	RESISTOR SMD	1/16W 75R J
R410	VE-30012644	RESISTOR SMD	1/16W 12K J
R411	VE-30012669	RESISTOR SMD	1/16W 22K J
R412	VE-30014078	RESISTOR SMD	1/16W 22R J
R413	VE-30012657	RESISTOR SMD	1/16W 1K J
R414	VE-30012713	RESISTOR SMD	1/16W 75R J
R415	VE-30012510	RESISTOR SMD	1/16W 100R J
R416	VE-30018254	RESISTOR SARRAY	1/16W 10R J
R417	VE-30018254	RESISTOR SARRAY	1/16W 10R J
R425	VE-30012695	RESISTOR SMD	1/16W 470R J
R426	VE-30012695	RESISTOR SMD	1/16W 470R J
R427	VE-30012695	RESISTOR SMD	1/16W 470R J
R431	VE-30012657	RESISTOR SMD	1/16W 1K J
R432	VE-30012657	RESISTOR SMD	1/16W 1K J
R434	VE-30012657	RESISTOR SMD	1/16W 1K J
R437	VE-30012713	RESISTOR SMD	1/16W 75R J
R438	VE-30012713	RESISTOR SMD	1/16W 75R J
R439	VE-30012713	RESISTOR SMD	1/16W 75R J
R440	VE-30012641	RESISTOR SMD	1/16W 10K J
R441	VE-30012641	RESISTOR SMD	1/16W 10K J
R442	VE-30012641	RESISTOR SMD	1/16W 10K J
R443	VE-30012641	RESISTOR SMD	1/16W 10K J
R450	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R454	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R456	VE-30012510	RESISTOR SMD	1/16W 100R J
R457	VE-30012510	RESISTOR SMD	1/16W 100R J
R503	VE-30012510	RESISTOR SMD	1/16W 100R J
R504	VE-30012510	RESISTOR SMD	1/16W 100R J
R505	VE-30012510	RESISTOR SMD	1/16W 100R J
R506	VE-30012510	RESISTOR SMD	1/16W 100R J
R507	VE-30012698	RESISTOR SMD	1/16W 5.6K J
R508	VE-30012510	RESISTOR SMD	1/16W 100R J
R509	VE-30012641	RESISTOR SMD	1/16W 10K J
R510	VE-30012644	RESISTOR SMD	1/16W 12K J
R511	VE-30012696	RESISTOR SMD	1/16W 47K J
R512	VE-30012684	RESISTOR SMD	1/16W 330R J
R513	VE-30012713	RESISTOR SMD	1/16W 75R J
R514	VE-30012669	RESISTOR SMD	1/16W 22K J
R515	VE-30012669	RESISTOR SMD	1/16W 22K J
R516	VE-30012695	RESISTOR SMD	1/16W 470R J
R517	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R518	VE-30012510	RESISTOR SMD	1/16W 100R J
R522	VE-30012685	RESISTOR SMD	1/16W 33K J
R523	VE-30012677	RESISTOR SMD	1/16W 3.3K J
R524	VE-30012643	RESISTOR SMD	1/16W 120R J
R525	VE-30012707	RESISTOR SMD	1/16W 680R J
R527	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R528	VE-30012574	CAPACITOR SMD	470pF 50V J
R529	VE-30012982	RESISTOR SMD	1/16W 10R J
R530	VE-30014022	RESISTOR SMD	1/16W 47R J
R531	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R600	VE-30012713	RESISTOR SMD	1/16W 75R J
R601	VE-30012713	RESISTOR SMD	1/16W 75R J
R602	VE-30012510	RESISTOR SMD	1/16W 100R J
R603	VE-30012510	RESISTOR SMD	1/16W 100R J
R604	VE-30012982	RESISTOR SMD	1/16W 10R J
R605	VE-30012695	RESISTOR SMD	1/16W 470R J
R606	VE-30012641	RESISTOR SMD	1/16W 10K J
R607	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R608	VE-30012713	RESISTOR SMD	1/16W 75R J
R609	VE-30012982	RESISTOR SMD	1/16W 10R J
R610	VE-30012695	RESISTOR SMD	1/16W 470R J
R611	VE-30012641	RESISTOR SMD	1/16W 10K J
R612	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R613	VE-30012713	RESISTOR SMD	1/16W 75R J
R614	VE-30000797	RESISTOR SMD	1/10W 75R J
R615	VE-30012713	RESISTOR SMD	1/16W 75R J
R617	VE-30012713	RESISTOR SMD	1/16W 75R J
R618	VE-30012982	RESISTOR SMD	1/16W 10R J
R619	VE-30012695	RESISTOR SMD	1/16W 470R J
R620	VE-30012641	RESISTOR SMD	1/16W 10K J
R621	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R622	VE-30012713	RESISTOR SMD	1/16W 75R J
R623	VE-30012713	RESISTOR SMD	1/16W 75R J
R625	VE-30012982	RESISTOR SMD	1/16W 10R J
R626	VE-30012695	RESISTOR SMD	1/16W 470R J
R627	VE-30012641	RESISTOR SMD	1/16W 10K J
R628	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R629	VE-30012713	RESISTOR SMD	1/16W 75R J
R630	VE-30000797	RESISTOR SMD	1/10W 75R J
R631	VE-30012713	RESISTOR SMD	1/16W 75R J
R632	VE-30012509	RESISTOR SMD	1/16W 100K J
R633	VE-30012509	RESISTOR SMD	1/16W 100K J
R634	VE-30012509	RESISTOR SMD	1/16W 100K J
R635	VE-30012509	RESISTOR SMD	1/16W 100K J
R636	VE-30012509	RESISTOR SMD	1/16W 100K J
R637	VE-30012509	RESISTOR SMD	1/16W 100K J
R700	VE-30012641	RESISTOR SMD	1/16W 10K J
R701	VE-30012641	RESISTOR SMD	1/16W 10K J
R702	VE-30012510	RESISTOR SMD	1/16W 100R J
R703	VE-30012510	RESISTOR SMD	1/16W 100R J
R704	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R705	VE-30012712	RESISTOR SMD	1/16W 8.2K J
R706	VE-30012641	RESISTOR SMD	1/16W 10K J
R707	VE-30012712	RESISTOR SMD	1/16W 8.2K J
R708	VE-30012665	RESISTOR SMD	1/16W 20K J
R709	VE-30012665	RESISTOR SMD	1/16W 20K J
R710	VE-30012641	RESISTOR SMD	1/16W 10K J
R711	VE-30012510	RESISTOR SMD	1/16W 100R J
R712	VE-30012657	RESISTOR SMD	1/16W 1K J
R713	VE-30012657	RESISTOR SMD	1/16W 1K J
R714	VE-30012702	RESISTOR SMD	1/16W 560R J
R715	VE-30012702	RESISTOR SMD	1/16W 560R J
R716	VE-30012702	RESISTOR SMD	1/16W 560R J
R717	VE-30012702	RESISTOR SMD	1/16W 560R J
R718	VE-30012657	RESISTOR SMD	1/16W 1K J
R719	VE-30012657	RESISTOR SMD	1/16W 1K J
R723	VE-30012713	RESISTOR SMD	1/16W 75R J
R724	VE-30012713	RESISTOR SMD	1/16W 75R J
R725	VE-30012713	RESISTOR SMD	1/16W 75R J
R726	VE-30012657	RESISTOR SMD	1/16W 1K J
R727	VE-30012657	RESISTOR SMD	1/16W 1K J
R729	VE-30012713	RESISTOR SMD	1/16W 75R J
R731	VE-30012713	RESISTOR SMD	1/16W 75R J
R732	VE-30012713	RESISTOR SMD	1/16W 75R J
R734	VE-30012510	RESISTOR SMD	1/16W 100R J
R735	VE-30012510	RESISTOR SMD	1/16W 100R J
R736	VE-30012657	RESISTOR SMD	1/16W 1K J
R737	VE-30012657	RESISTOR SMD	1/16W 1K J
R738	VE-30012657	RESISTOR SMD	1/16W 1K J
R739	VE-30012657	RESISTOR SMD	1/16W 1K J
R740	VE-30012657	RESISTOR SMD	1/16W 1K J
R741	VE-30012657	RESISTOR SMD	1/16W 1K J
R742	VE-30012642	RESISTOR SMD	1/16W 120K J
R743	VE-30012644	RESISTOR SMD	1/16W 12K J
R744	VE-30012696	RESISTOR SMD	1/16W 47K J
R745	VE-30012689	RESISTOR SMD	1/16W 39K J
R746	VE-30012674	RESISTOR SMD	1/16W 27K J
R747	VE-30012713	RESISTOR SMD	1/16W 75R J
R748	VE-30012713	RESISTOR SMD	1/16W 75R J
R749	VE-30012668	RESISTOR SMD	1/16W 220R J
R751	VE-30012510	RESISTOR SMD	1/16W 100R J
R752	VE-30012657	RESISTOR SMD	1/16W 1K J
R753	VE-30012641	RESISTOR SMD	1/16W 10K J
R754	VE-30012641	RESISTOR SMD	1/16W 10K J
R756	VE-30012641	RESISTOR SMD	1/16W 10K J
R757	VE-30012641	RESISTOR SMD	1/16W 10K J
R759	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R760	VE-30012641	RESISTOR SMD	1/16W 10K J

⚠Ref No.	Part No.	Part Name	Description Local
R761	VE-30010560	CAPACITOR SMD	220nF 25V K R
R762	VE-30012713	RESISTOR SMD	1/16W 75R J
R763	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R764	VE-30012657	RESISTOR SMD	1/16W 1K J
R765	VE-30012641	RESISTOR SMD	1/16W 10K J
R766	VE-30012509	RESISTOR SMD	1/16W 100K J
R767	VE-30012509	RESISTOR SMD	1/16W 100K J
R768	VE-30012509	RESISTOR SMD	1/16W 100K J
R769	VE-30012509	RESISTOR SMD	1/16W 100K J
R770	VE-30012641	RESISTOR SMD	1/16W 10K J
R771	VE-30012641	RESISTOR SMD	1/16W 10K J
R778	VE-30012641	RESISTOR SMD	1/16W 10K J
R779	VE-30012509	RESISTOR SMD	1/16W 100K J
R780	VE-30012669	RESISTOR SMD	1/16W 22K J
R784	VE-30010560	CAPACITOR SMD	220nF 25V K R
R785	VE-30010560	CAPACITOR SMD	220nF 25V K R
R786	VE-30012713	RESISTOR SMD	1/16W 75R J
R787	VE-30012713	RESISTOR SMD	1/16W 75R J
R788	VE-30012657	RESISTOR SMD	1/16W 1K J
R800	VE-30012692	RESISTOR SMD	1/16W 4.7K J
R801	VE-30014128	RESISTOR SMD	1/16W 33R J
R901	VE-30012641	RESISTOR SMD	1/16W 10K J
R902	VE-30012509	RESISTOR SMD	1/16W 100K J
R903	VE-30012641	RESISTOR SMD	1/16W 10K J
R904	VE-30012641	RESISTOR SMD	1/16W 10K J
R907	VE-30012510	RESISTOR SMD	1/16W 100R J
R908	VE-30012510	RESISTOR SMD	1/16W 100R J
R909	VE-30012677	RESISTOR SMD	1/16W 3.3K J
R910	VE-30012510	RESISTOR SMD	1/16W 100R J
R911	VE-30012510	RESISTOR SMD	1/16W 100R J
R912	VE-30012655	RESISTOR SMD	1/16W 180R J
R913	VE-30012659	RESISTOR SMD	1/16W 2.2K J
R915	VE-30012703	RESISTOR SMD	1/16W 56K J
R916	VE-30000833	RESISTOR SMD	1/10W 91R J
R917	VE-30000833	RESISTOR SMD	1/10W 91R J
R918	VE-30012705	RESISTOR SMD	1/16W 6.8K J
R919	VE-30000833	RESISTOR SMD	1/10W 91R J
R920	VE-30000717	RESISTOR SMD	1/10W 470R J
R921	VE-30006462	RESISTOR SMD	1/10W 22R J
R922	VE-30012641	RESISTOR SMD	1/16W 10K J
R923	VE-30012641	RESISTOR SMD	1/16W 10K J
R924	VE-30012641	RESISTOR SMD	1/16W 10K J
R925	VE-30012641	RESISTOR SMD	1/16W 10K J
R926	VE-30012641	RESISTOR SMD	1/16W 10K J
R927	VE-30012641	RESISTOR SMD	1/16W 10K J
R928	VE-30012641	RESISTOR SMD	1/16W 10K J
R929	VE-30012642	RESISTOR SMD	1/16W 120K J
L100	VE-30001996	FIXED COIL	22uH Q40 K
L101	VE-30001971	FERRITE SMD	
L101	VE-30001996	FIXED COIL	22uH Q40 K
L102	VE-30001979	FIXED COIL	1uH Q45 M-A
L103	VE-30001979	FIXED COIL	1uH Q45 M-A
L104	VE-30001971	FERRITE SMD	
L105	VE-30001971	FERRITE SMD	
L109	VE-30001971	FERRITE SMD	
L110	VE-30001971	FERRITE SMD	
L111	VE-30001971	FERRITE SMD	
L113	VE-30020896	FERRITE SMD	
L300	VE-30017143	FIXED COIL SMD	
L301	VE-30018093	FIXED COIL SMD	
L302	VE-30018093	FIXED COIL SMD	
L303	VE-30018093	FIXED COIL SMD	
L304	VE-30001990	FIXED COIL	6.8uH Q75 K
L305	VE-30001990	FIXED COIL	6.8uH Q75 K
L306	VE-30001971	FERRITE SMD	
L307	VE-30006712	FERRITE BEAD	
L308	VE-30002170	FERRITE CORE	
L309	VE-30001971	FERRITE SMD	
L401	VE-30001971	FERRITE SMD	
L402	VE-30001971	FERRITE SMD	
L408	VE-30001971	FERRITE SMD	
L409	VE-30001996	FIXED COIL	22uH Q40 K
L501	VE-30001971	FERRITE SMD	
L502	VE-30001971	FERRITE SMD	
L503	VE-30001971	FERRITE SMD	
L504	VE-30001996	FIXED COIL	22uH Q40 K
L600	VE-30017143	FIXED COIL SMD	
L700	VE-30001971	FERRITE SMD	
L701	VE-30001971	FERRITE SMD	
L702	VE-30001971	FERRITE SMD	
L703	VE-30001971	FERRITE SMD	
L704	VE-30001971	FERRITE SMD	
L705	VE-30001971	FERRITE SMD	
L707	VE-30001971	FERRITE SMD	
L708	VE-30001971	FERRITE SMD	
L709	VE-30001971	FERRITE SMD	

⚠Ref No.	Part No.	Part Name	Description Local
L710	VE-30006712	FERRITE BEAD	
L711	VE-30013412	FERRITE SMD	
L712	VE-30013412	FERRITE SMD	
L713	VE-30001971	FERRITE SMD	
L714	VE-30001971	FERRITE SMD	
L715	VE-30001971	FERRITE SMD	
L716	VE-30001971	FERRITE SMD	
L717	VE-30001971	FERRITE SMD	
L718	VE-30024779	FERRITE SMD	
L719	VE-30024779	FERRITE SMD	
L721	VE-30024779	FERRITE SMD	
L722	VE-30024779	FERRITE SMD	
L723	VE-30001971	FERRITE SMD	
L724	VE-30013412	FERRITE SMD	
L725	VE-30013412	FERRITE SMD	
L726	VE-30001971	FERRITE SMD	
L727	VE-30001971	FERRITE SMD	
L728	VE-30001971	FERRITE SMD	
L729	VE-30001971	FERRITE SMD	
L734	VE-30001971	FERRITE SMD	
L800	VE-30018093	FIXED COIL SMD	
L801	VE-30002170	FERRITE CORE	
L802	VE-30020394	FERRITE SMD	
L803	VE-30020394	FERRITE SMD	
L805	VE-30001971	FERRITE SMD	
L900	VE-30002170	FERRITE CORE	
L901	VE-30019475	FIXED COIL	47uH 2A RAD SH 14X16
L903	VE-30002170	FERRITE CORE	
L904	VE-30019475	FIXED COIL	47uH 2A RAD SH 14X16
L906	VE-30001996	FIXED COIL	22uH Q40 K
L907	VE-30002170	FERRITE CORE	
L908	VE-30019475	FIXED COIL	47uH 2A RAD SH 14X16
L910	VE-30002002	FIXED COIL	47uH Q60 K
L911	VE-30011450	FIXED COIL	22uH 5.4A RAD 11.5*15.5
⚠F900	VE-30018031	FUSE	4A/24VDC UF 1206
⚠F901	VE-30028331	FUSE	7A/32VDC 1206
JK100	VE-30001900	HEADPHONE JACK	HP01/2/3/4/5/6
JK101	VE-30001893	RCA JACK	1P YELLOW 28 FAV
JK102	VE-30001891	RCA JACK	1P WHITE 28 FAV
JK103	VE-30001892	RCA JACK	1P RED 28 FAV
JK104	VE-30001895	JACK	4P DIN TYPE FOR SVHS
JK105	VE-30001891	RCA JACK	1P WHITE 28 FAV
JK106	VE-30001892	RCA JACK	1P RED 28 FAV
JK107	VE-30033200	RCA JACK	1P BLACK 28 FAV
JK700	VE-30001902	HEADPHONE JACK	STEREO WO/SW
JK702	VE-30001891	RCA JACK	1P WHITE 28 FAV
JK703	VE-30001892	RCA JACK	1P RED 28 FAV
JK704	VE-30001892	RCA JACK	1P RED 28 FAV
JK705	VE-30032233	RCA JACK	1P GREEN 28 FAV
JK706	VE-30032234	RCA JACK	1P BLUE 28 FAV
JK901	VE-30027932	DC POWER SOCKET 7.5A	
PL101	VE-30032051	D SOCKET	D-SUB 15P FOR TFT
S100	VE-30006712	FERRITE BEAD	
S102	VE-30006712	FERRITE BEAD	
S103	VE-30006712	FERRITE BEAD	
S104	VE-30006712	FERRITE BEAD	
S105	VE-30006712	FERRITE BEAD	
S106	VE-30006712	FERRITE BEAD	
S730	VE-30012695	RESISTOR SMD	1/16W 470R J
SW1	VE-30002181	TACT SWITCH	
SW2	VE-30002181	TACT SWITCH	
SW3	VE-30002181	TACT SWITCH	
SW4	VE-30002181	TACT SWITCH	
SW5	VE-30002181	TACT SWITCH	
SW7	VE-30002181	TACT SWITCH	
SW17	VE-30002181	TACT SWITCH	
⚠TU500	VE-30020654	TUNER WSP (PLL)	
X100	VE-30017946	CLYSTAL	14.318 MHZ
X300	VE-30006662	CLYSTAL	6.000 20p HC49U
X400	VE-30008778	CLYSTAL	20.250 13p HC49U
X500	VE-30021113	CLYSTAL	4MHZ LOW PROFILE
X700	VE-30001756	CLYSTAL	18.432 12p HC49U
Z101	VE-30017312	CABL 1P/450 DIS UL1672AWG22	
Z500	VE-30001692	SAW FILTER	OFWK3953M
Z501	VE-30012545	SAW FILTER	K9656M

PACKING





PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	VE-20182808	CARTON BOX		LT-23C50BJ
	1	VE-20185661	CARTON BOX	For Germany	LT-23C50BU
	1	VE-20185671	CARTON BOX	For Italy	LT-23C50BU
	1	VE-20185852	CARTON BOX		LT-23C50BU/Z
	1	VE-20185825	CARTON BOX		LT-23C50SU
	1	VE-20185663	CARTON BOX		LT-23C50SU/Z
	1	VE-20185816	CARTON BOX		LT-23C88SJ
	2	VE-20176628	SNOW BOX ASSY		
	3	VE-30034032	REMOTE CONTROL UNIT	RM-C1860	
⚠	4	VE-30030071	AC ADPTER	24VDC 6A C14 4PO W/PFC SAFE-PKG	
⚠	5	VE-50058107	INST BOOK	English	LT-23C50BJ
⚠	6	VE-50059360	INST BOOK	Russian/Romanian/Czech/Polish/Hungarian/Bulgarian	LT-23C50BU,LT-23C50SU
⚠	7	VE-50059358	INST BOOK	German/French/English/Spanish/Portuguese/Italian/Dutch	LT-23C50BU,LT-23C50SU,LT-23C50BU/Z,LT-23C50SU/Z
⚠	8	VE-50059359	INST BOOK	Danish/Finn/Norwegian/Swedish	LT-23C50BU,LT-23C50SU
⚠	9	VE-50059427	INST BOOK	English	LT-23C88SJ
⚠	10	VE-30035135	POWER CORD	For AC ADAPTER	LT-23C50BU/Z,LT-23C50SU/Z
⚠	11	VE-30024540	POWER CORD	For AC ADAPTER	LT-23C50BU,LT-23C50SU
⚠	12	VE-30028238	POWER CORD	For AC ADAPTER	LT-23C50BJ,LT-23C88SJ
	13	--------	WARANTY CARD	BT-54023-1E	
	14	--------	BATTERY	AA/R06(x2)	
	15	VE-50018337	POLY BAG		